



1/48

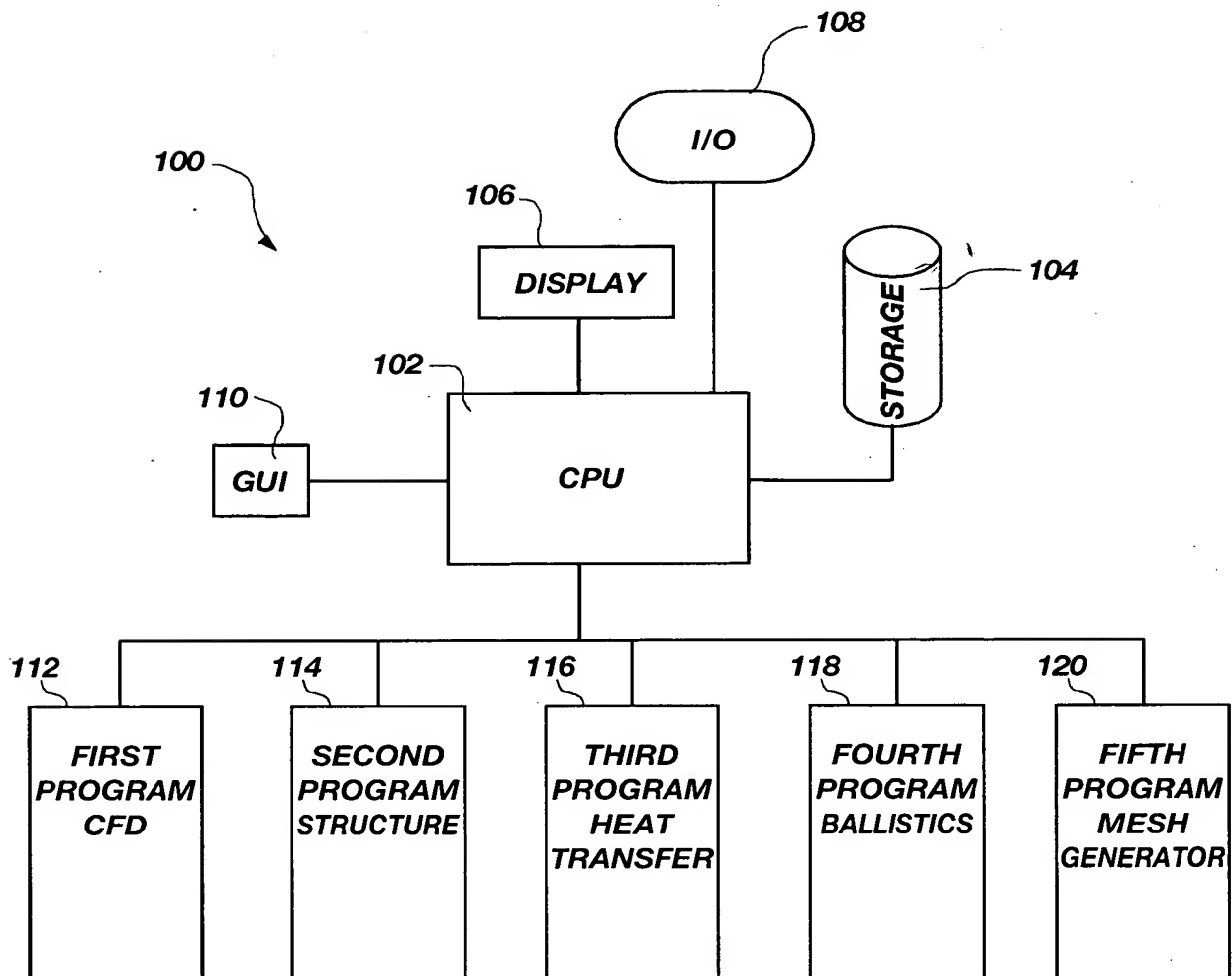


FIG. 1

2/48

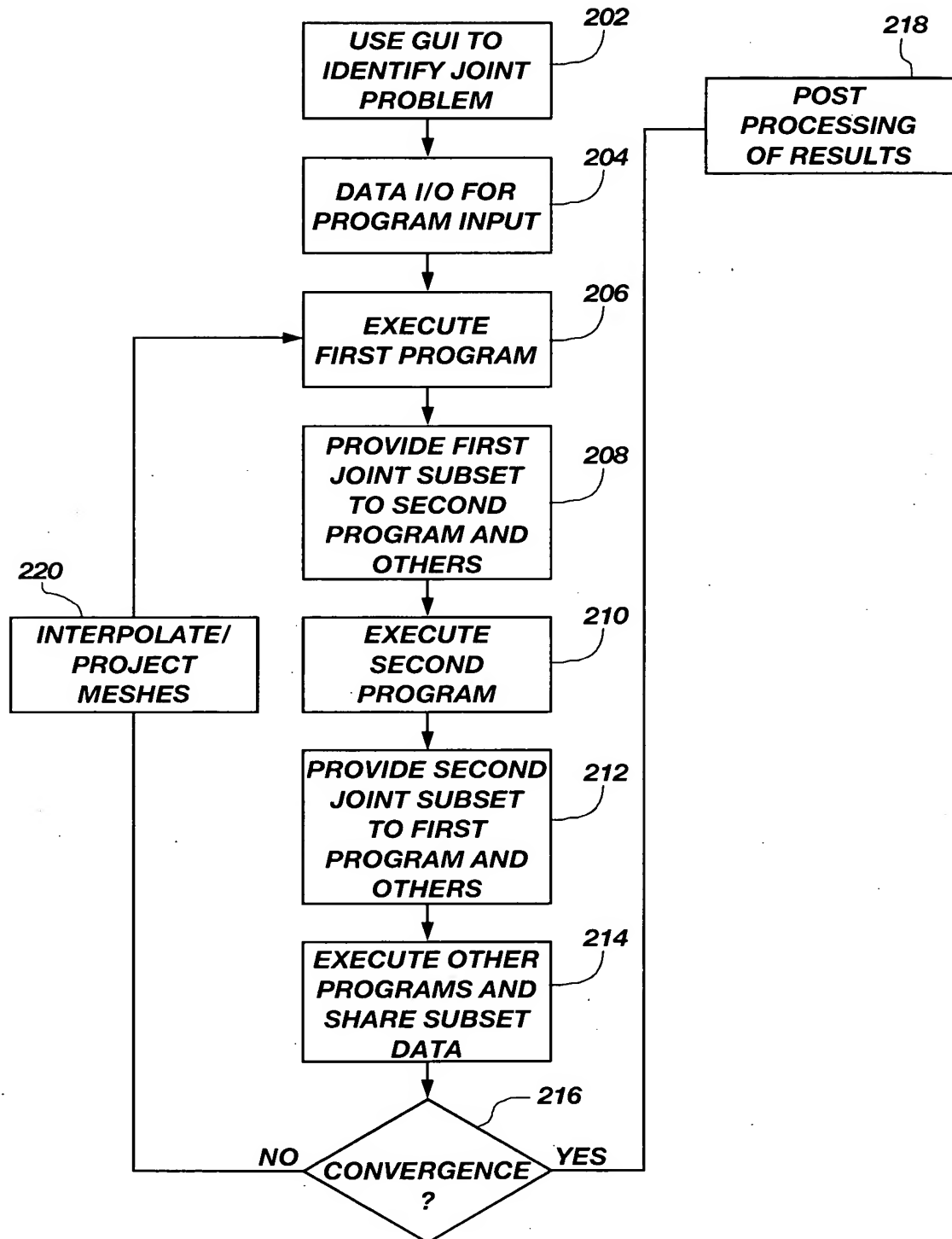


FIG. 2

3/48

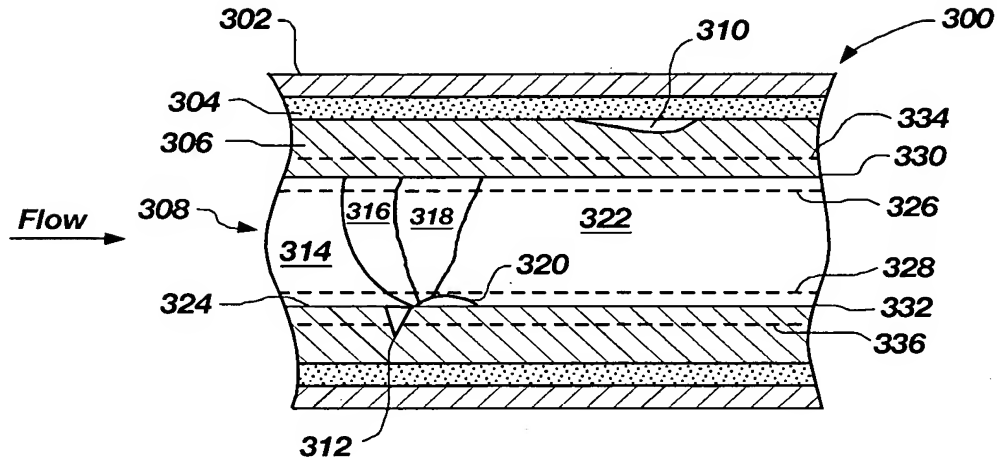


FIG. 3

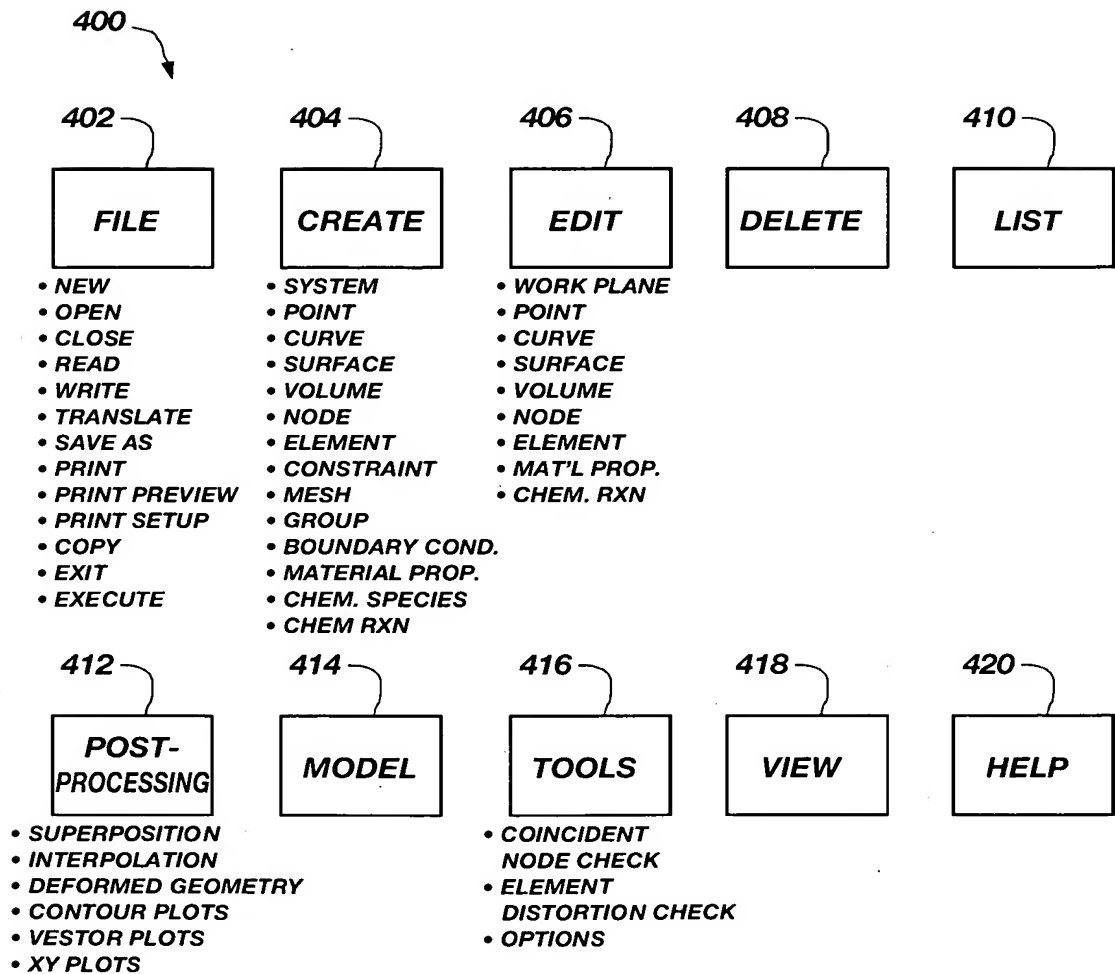


FIG. 4

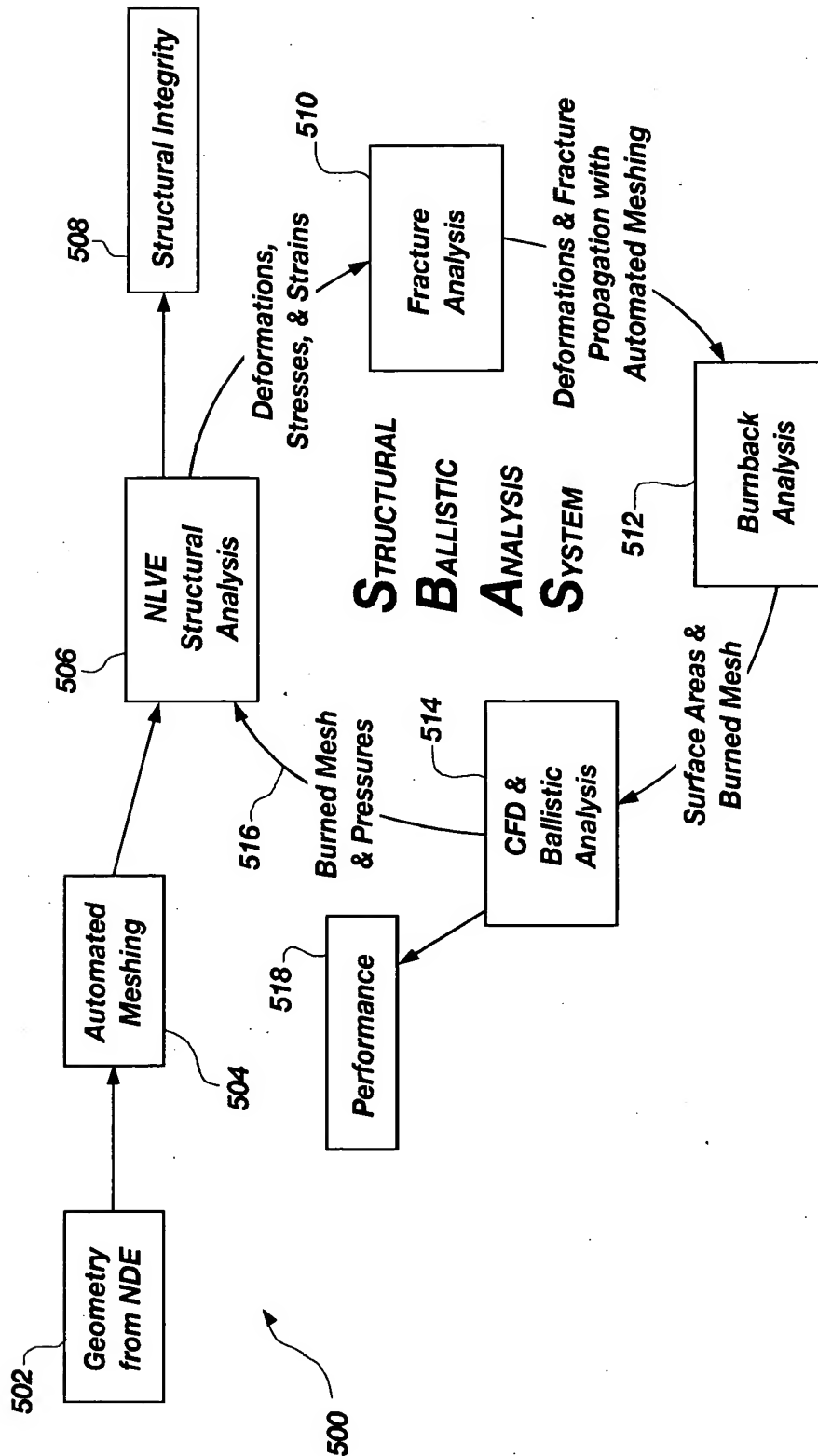


FIG. 5

5/48

Node Key:

- X Corner and Mid-side node (Required)
 O Mid-side node (Optional)
 + Face center node (Optional)
 ◇ Element center node (Optional)

TYPE	LINEAR	PARABOLIC	VARIABLE
Point			
Line			
Triangle Face 0=0, 1, 3 Face 1=1, 2, 4 Face 2=2, 0, 5			
Quadrilateral Face 0=0, 1, 4 Face 1=1, 2, 5 Face 2=2, 3, 6 Face 3=3, 0, 7			
Tetrahedron Face 0=0, 2, 1 6, 5, 4 Face 1=0, 1, 3 4, 8, 7 Face 2=1, 2, 3 5, 9, 8 Face 3=2, 0, 3 6, 7, 9			
Wedge Face 0=0, 2, 1 8, 7, 6 Face 1=3, 4, 5 9, 10, 11 Face 2=0, 1, 4, 3 6, 13, 9, 12, 15 Face 3=1, 2, 5, 4 7, 14, 10, 13, 16 Face 4=2, 0, 3, 5 8, 12, 11, 14, 17			
Brick Face 0=0, 3, 2, 1 11, 10, 9, 8, 21 Face 1=4, 5, 6, 7 12, 13, 14, 15, 22 Face 2=0, 1, 5, 4 8, 17, 12, 16, 23 Face 3=1, 2, 6, 5 9, 18, 13, 17, 24 Face 4=2, 3, 7, 6 10, 19, 14, 18, 25 Face 5=3, 0, 4, 7 11, 16, 15, 19, 26			

FIG. 6

6/48

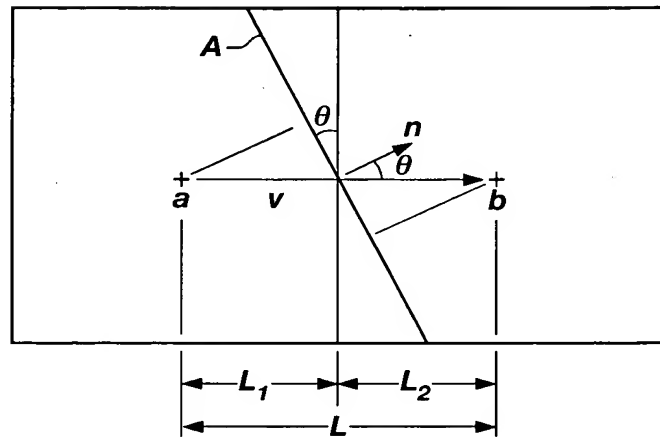


FIG. 7

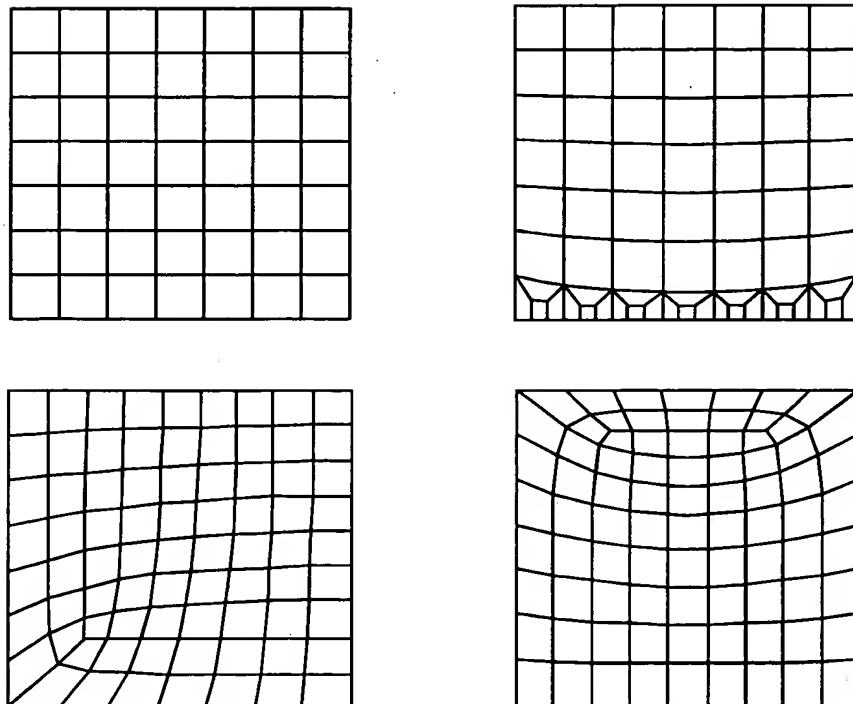


FIG. 8

7/48

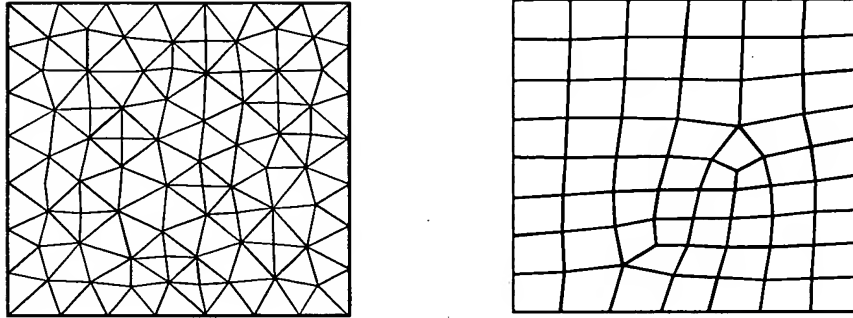


FIG. 9

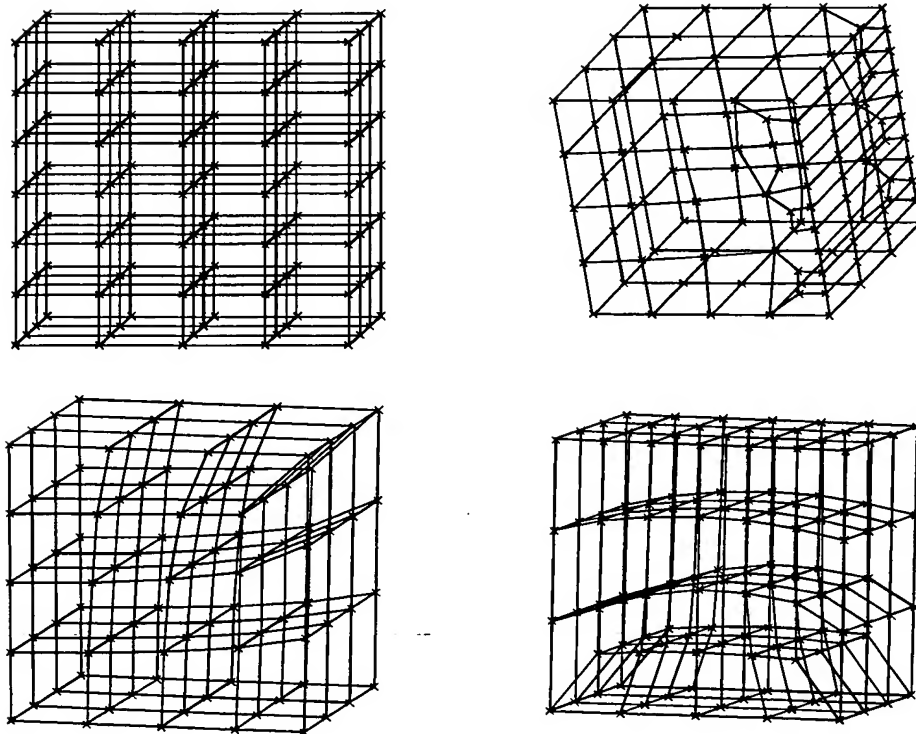


FIG. 10

8/48

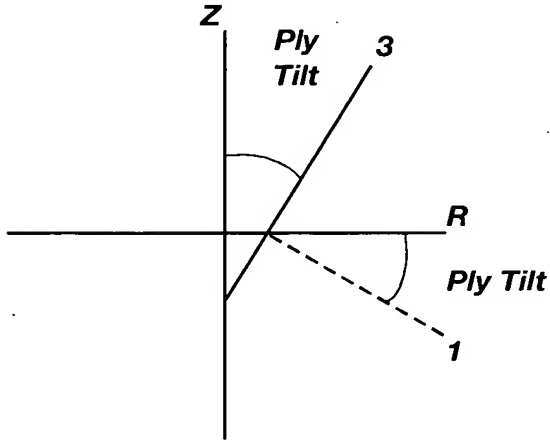


FIG. 11

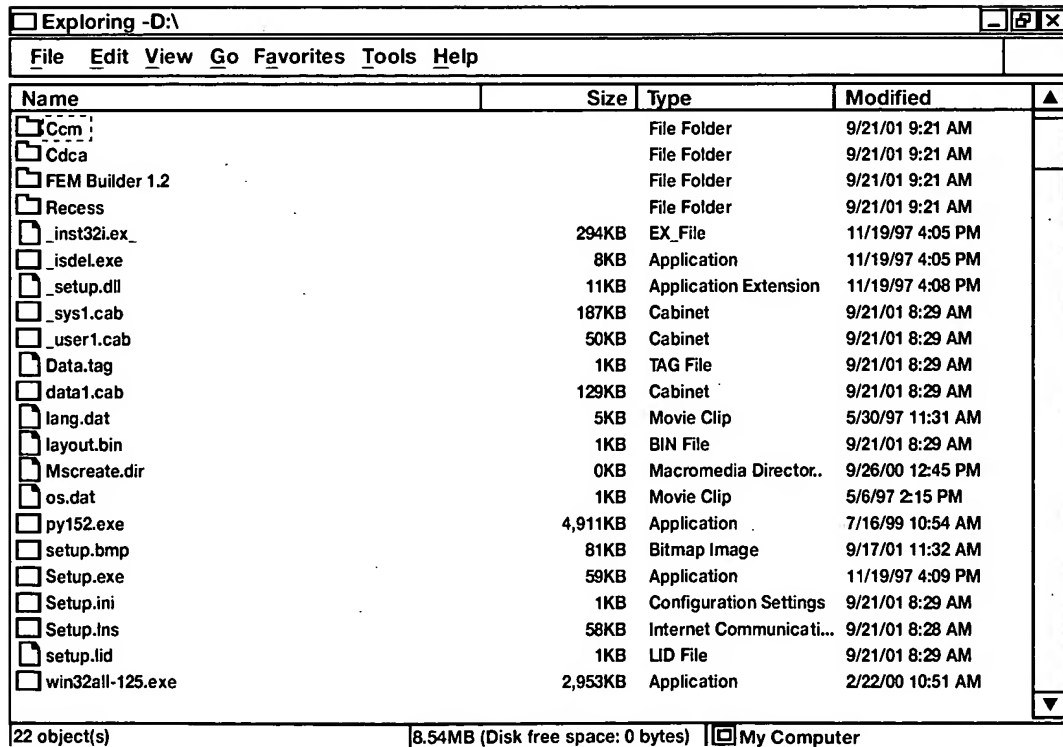


FIG. 12

9/48

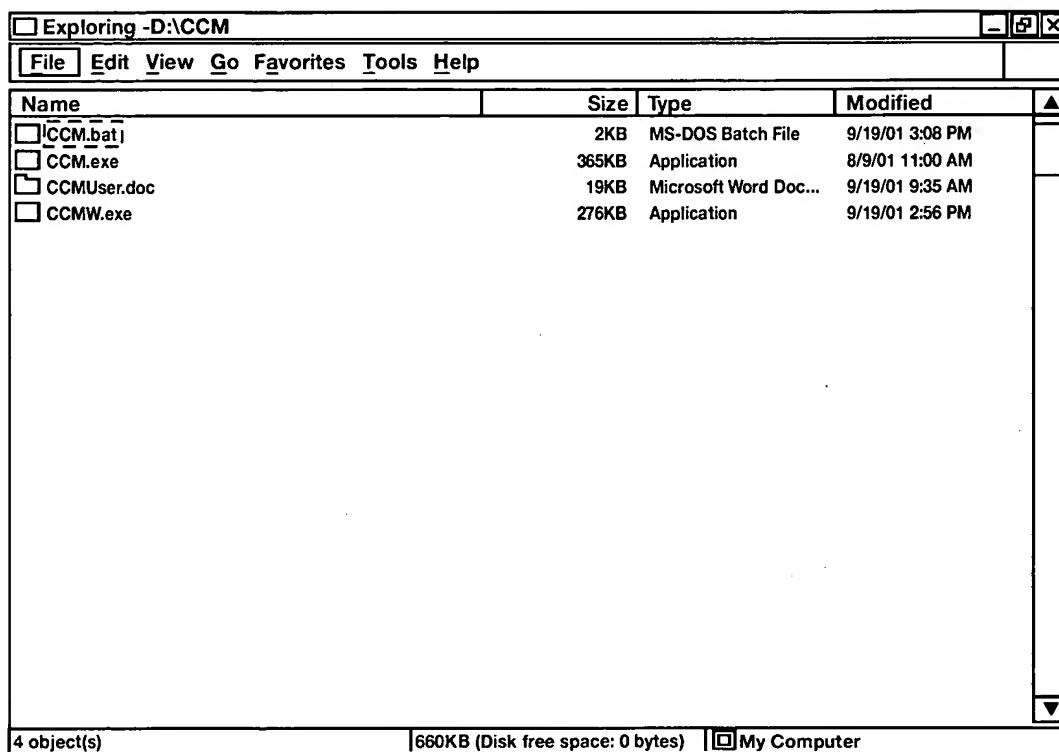


FIG. 13

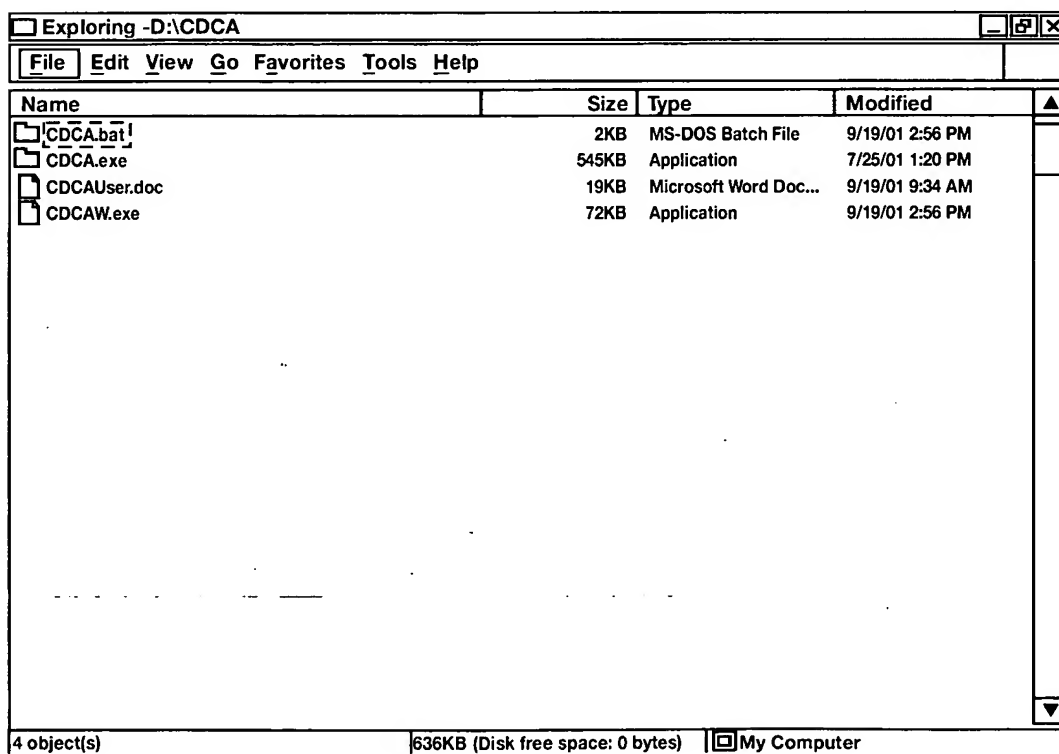


FIG. 14

10/48

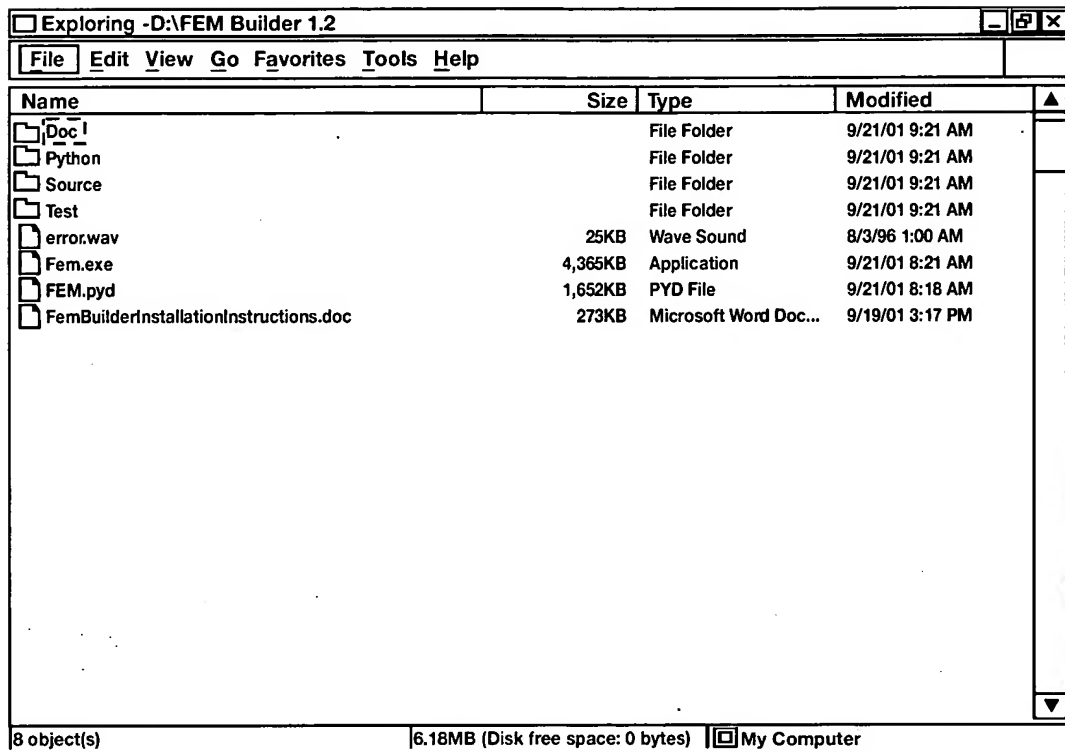


FIG. 15

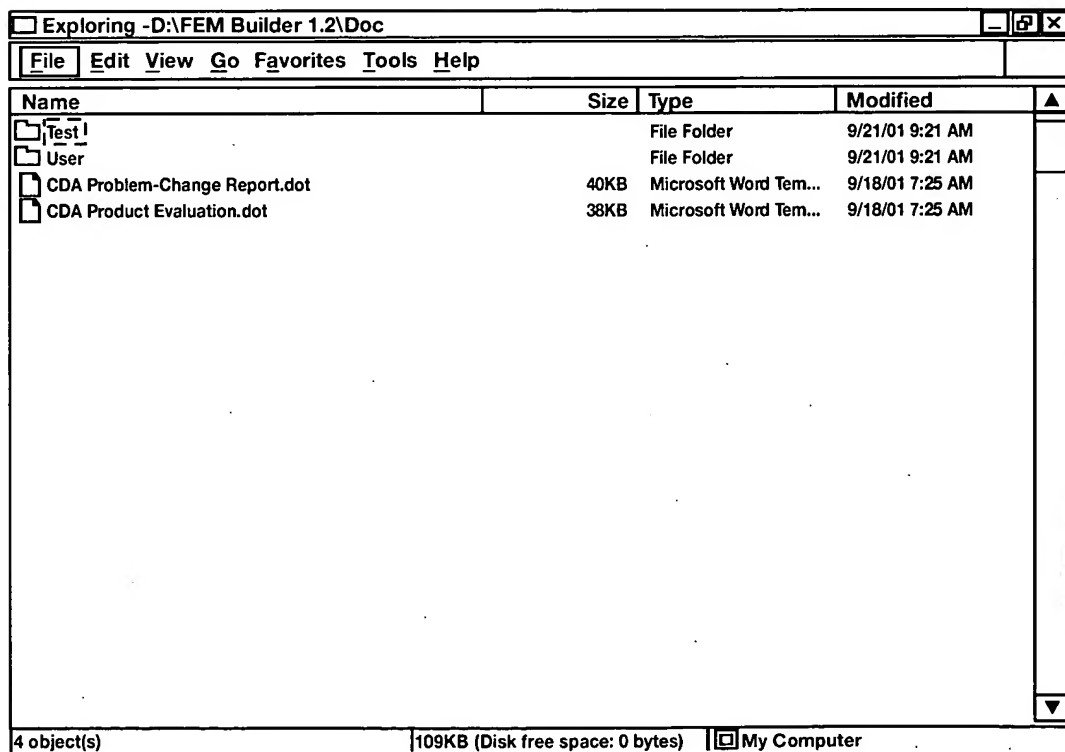


FIG. 16

11/48

Exploring -D:\FEM Builder 1.2\Doc\Test			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
FEMBuilderTest.doc	168KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCoincidentNode_1.doc	43KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestConstrain2d_1.doc	79KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestConstrain2d_2.doc	76KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestConstrain2d_3.doc	77KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestConstrain3d_1.doc	117KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestConstrain3d_2.doc	91KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestConstrain3d_3.doc	102KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCopyPrint_1.doc	96KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCopyPrint_2.doc	28KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCreateBC_1.doc	111KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCreateBC_10.doc	49KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_11.doc	49KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_12.doc	98KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCreateBC_13.doc	56KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_2.doc	41KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_3.doc	39KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCreateBC_4.doc	38KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_5.doc	47KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_6.doc	39KB	Microsoft Word Doc...	9/20/01 10:38 AM
FEMBuilderTestCreateBC_7.doc	41KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_8.doc	40KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateBC_9.doc	48KB	Microsoft Word Doc...	9/18/01 7:09 AM
210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer			

FIG. 17

Exploring -D:\FEM Builder 1.2\Doc\Test			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
FEMBuilderTestCreateChemReaction_1.doc	32KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateGeometry_1.doc	130KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestCreateGeometry_2.doc	108KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestCreateGeometry_3.doc	109KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestCreateGeometry_4.doc	109KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestCreateGeometry_5.doc	148KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestCreateGeometry_6.doc	59KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestCreateIC_1.doc	106KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestCreateSystem_1.doc	44KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestDeform_1.doc	39KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestDeform_2.doc	40KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestDeform_3.doc	37KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestDeleteBCs_1.doc	412KB	Microsoft Word Doc...	9/18/01 7:09 AM
FEMBuilderTestDeleteMaterial_1.doc	36KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestDeleteSystem_1.doc	73KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestDistortionCheck2d_1.doc	56KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestDistortionCheck3d_1.doc	66KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditBCColor_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditCurve_1.doc	87KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestEditCurve_2.doc	126KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditCurve_1.doc	69KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditElementOrientation_1.doc	76KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditElementOrientation_2.doc	118KB	Microsoft Word Doc...	9/18/01 7:10 AM
210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer			

FIG. 18

12/48

Exploring -D:\FEM Builder 1.2\Doc\Test

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
FEMBuilderTestInsertFlaw2D_2.doc	69KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceAbaqus_1.doc	30KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceAbaqus_2.doc	28KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceAnsys_1.doc	73KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceAnsys_2.doc	44KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceAschar_1.doc	100KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceAschar_2.doc	51KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceFemDB_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceFemDB_2.doc	27KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceFluent_1.doc	31KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceFluent_2.doc	98KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceGridGen_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceGridGen_2.doc	36KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInterfaceIdeas_1.doc	44KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceIdeas_2.doc	29KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceMaterialProperty_1.doc	29KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfacePatran_1.doc	46KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceRdCCm_1.doc	30KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRdCCm_2.doc	31KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRdCDCA_1.doc	30KB	Microsoft Word Doc...	9/20/01 12:26 PM
FEMBuilderTestInterfaceRdCDCA_2.doc	31KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRdRecess_1-10.doc	36KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceRdSharp_1.doc	42KB	Microsoft Word Doc...	9/18/01 12:26 PM

210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer

FIG. 19

Exploring -D:\FEM Builder 1.2\Doc\Test

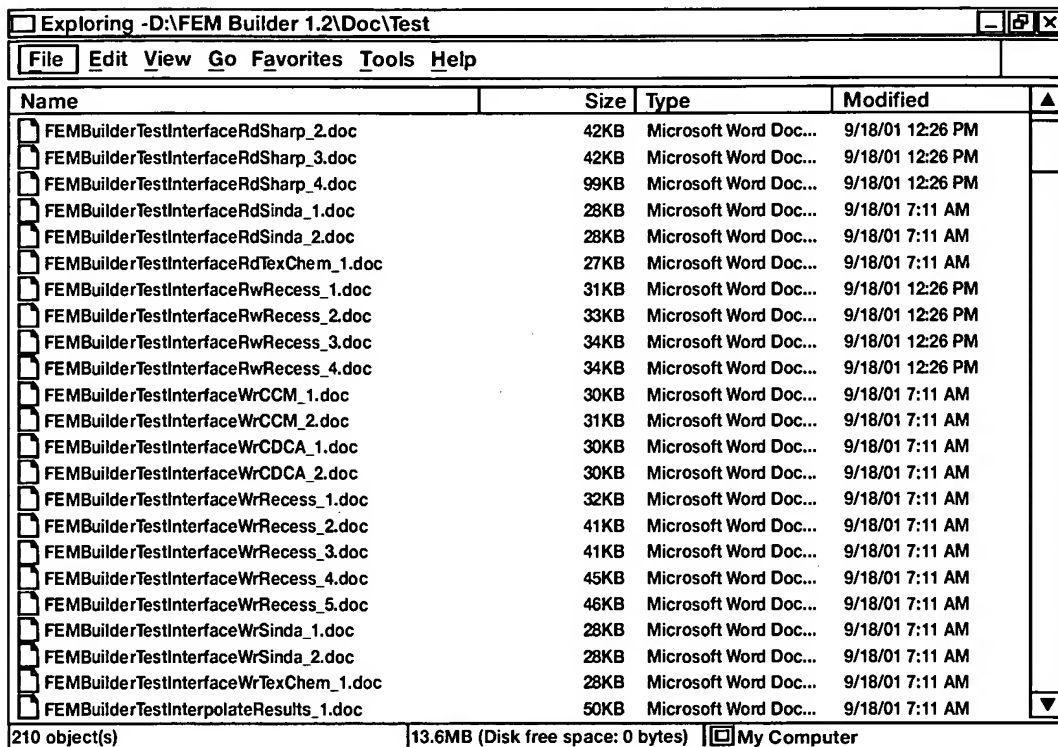
File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
FEMBuilderTestEditMeshAttribute_1.doc	37KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditNode_1.doc	68KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditWorkplane_1.doc	32KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestEditWorkplane_2.doc	42KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestExecuteAbaqus_1.doc	36KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestExecuteCCM_1.doc	32KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestExecuteCDCA_1.doc	33KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestExecuteFluent_1.doc	37KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestExecuteRecess_1.doc	33KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFemCreate_1.doc	80KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFemCreateGroup.doc	49KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFemDelete_1.doc	93KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFemDelete_2.doc	36KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFemEditColor_1.doc	91KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFracture_1.doc	105KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFracture_2.doc	65KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFracture_3.doc	71KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestFracture_4.doc	112KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestGeometryCreateGroup.doc	55KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestGeometryDelete_1.doc	154KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestGeometryEditColor_1.doc	175KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestHelp_1.doc	23KB	Microsoft Word Doc...	9/18/01 7:10 AM
FEMBuilderTestInsertFlaw2D_1.doc	77KB	Microsoft Word Doc...	9/18/01 7:10 AM

210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer

FIG. 20

13/48

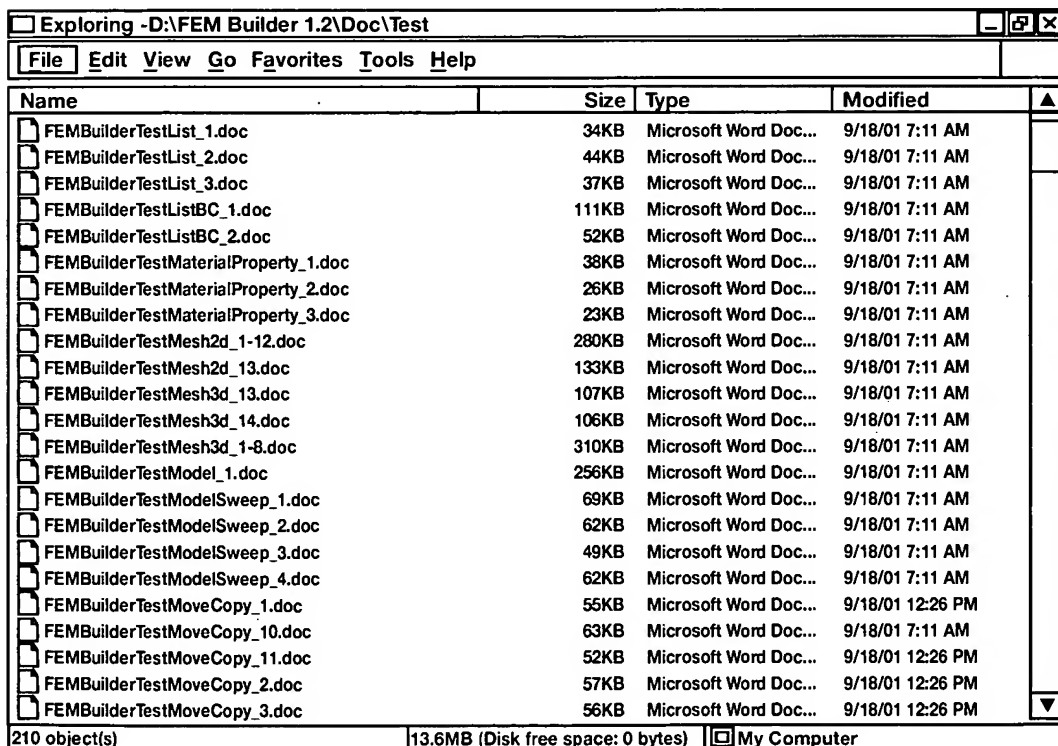


Exploring -D:\FEM Builder 1.2\Doc\Test

Name	Size	Type	Modified
FEMBuilderTestInterfaceRdSharp_2.doc	42KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRdSharp_3.doc	42KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRdSharp_4.doc	99KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRdSinda_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceRdSinda_2.doc	28KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceRdTexChem_1.doc	27KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceRwRecess_1.doc	31KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRwRecess_2.doc	33KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRwRecess_3.doc	34KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceRwRecess_4.doc	34KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestInterfaceWrCCM_1.doc	30KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrCCM_2.doc	31KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrCDA_1.doc	30KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrCDA_2.doc	30KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrRecess_1.doc	32KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrRecess_2.doc	41KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrRecess_3.doc	41KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrRecess_4.doc	45KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrRecess_5.doc	46KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrSinda_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrSinda_2.doc	28KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterfaceWrTexChem_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestInterpolateResults_1.doc	50KB	Microsoft Word Doc...	9/18/01 7:11 AM

210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer

FIG. 21



Exploring -D:\FEM Builder 1.2\Doc\Test

Name	Size	Type	Modified
FEMBuilderTestList_1.doc	34KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestList_2.doc	44KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestList_3.doc	37KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestListBC_1.doc	111KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestListBC_2.doc	52KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMaterialProperty_1.doc	38KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMaterialProperty_2.doc	26KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMaterialProperty_3.doc	23KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMesh2d_1-12.doc	280KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMesh2d_13.doc	133KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMesh3d_13.doc	107KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMesh3d_14.doc	106KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMesh3d_1-8.doc	310KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestModel_1.doc	256KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestModelSweep_1.doc	69KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestModelSweep_2.doc	62KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestModelSweep_3.doc	49KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestModelSweep_4.doc	62KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMoveCopy_1.doc	55KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestMoveCopy_10.doc	63KB	Microsoft Word Doc...	9/18/01 7:11 AM
FEMBuilderTestMoveCopy_11.doc	52KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestMoveCopy_2.doc	57KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestMoveCopy_3.doc	56KB	Microsoft Word Doc...	9/18/01 12:26 PM

210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer

FIG. 22

14/48

Exploring -D:\FEM Builder 1.2\Doc\Test				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
FEMBuilderTestMoveCopy_4.doc	60KB	Microsoft Word Doc...	9/18/01 12:26 PM	
FEMBuilderTestMoveCopy_5.doc	56KB	Microsoft Word Doc...	9/18/01 12:26 PM	
FEMBuilderTestMoveCopy_6.doc	67KB	Microsoft Word Doc...	9/18/01 12:26 PM	
FEMBuilderTestMoveCopy_7.doc	84KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestMoveCopy_8.doc	53KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestMoveCopy_9.doc	50KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostAverageResult.doc	80KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostContour_1.doc	97KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostContour_2.doc	32KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostDeform.doc	41KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestPostResults_1.doc	46KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestPostResults_2.doc	33KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostResults_3.doc	23KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostResults_4.doc	25KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostResults_5.doc	25KB	Microsoft Word Doc...	9/18/01 7:11 AM	
FEMBuilderTestPostVector.doc	32KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestPostXYPlot_1.doc	34KB	Microsoft Word Doc...	9/21/01 8:15 AM	
FEMBuilderTestPostXYPlot_2.doc	27KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestPostXYPlot_3.doc	28KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestPostXYPlot_4.doc	62KB	Microsoft Word Doc...	9/21/01 8:15 AM	
FEMBuilderTestPostXYPlot_5.doc	48KB	Microsoft Word Doc...	9/21/01 7:32 AM	
FEMBuilderTestPostXYPlot_6.doc	133KB	Microsoft Word Doc...	9/21/01 8:15 AM	
FEMBuilderTestPostXYPlot_7.doc	32KB	Microsoft Word Doc...	9/21/01 8:15 AM	
210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer				

FIG. 23

Exploring -D:\FEM Builder 1.2\Doc\Test				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
FEMBuilderTestPostXYPlot_8.doc	143KB	Microsoft Word Doc...	9/21/01 7:07 AM	
FEMBuilderTestPostXYPlot_9.doc	102KB	Microsoft Word Doc...	9/21/01 7:07 AM	
FEMBuilderTestRefineMesh_1.doc	164KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestRefineMesh_2.doc	81KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestRefineMesh_3.doc	86KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestRefineMesh_4.doc	83KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestRefineMesh_5.doc	64KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectAnalysisresults_1.doc	35KB	Microsoft Word Doc...	9/20/01 10:38 AM	
FEMBuilderTestSelectCurve_1.doc	55KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectElement_1.doc	152KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectFace_1.doc	56KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectGroup_1.doc	27KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectMaterialProperties_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectNode_1.doc	159KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectPoint_1.doc	51KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectSurface_1.doc	65KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectSystem_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSelectVolume_1.doc	80KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSmooth2d_1.doc	35KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSmooth2d_2.doc	37KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSmooth2d_3.doc	42KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestSolverLess2d_1.doc	271KB	Microsoft Word Doc...	9/18/01 7:12 AM	
FEMBuilderTestStandardAxisym1.doc	28KB	Microsoft Word Doc...	9/18/01 7:12 AM	
210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer				

FIG. 24

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.
Serial No.: 10/005,752
Docket No.: 2507-5744.1US

15/48

Exploring -D:\FEM Builder 1.2\Doc\Test			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
FEMBuilderTestStandardEdgeNotched2D.doc	164KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardEdgeNotched3D.doc	217KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardFluidCFD1.doc	36KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardHeat0.doc	44KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardHeat1.doc	47KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardHTAxisym1.doc	50KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardNozzle1.doc	38KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneE1.doc	25KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneE2.doc	30KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneS1.doc	25KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneS2.doc	30KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardSolid1L.doc	26KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardSolid1Q.doc	27KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardSolidCFD1.doc	36KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestSubModel_1.doc	53KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestSubModel_2.doc	51KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestSubModel_3.doc	54KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestThermalAblation_1.doc	68KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestThermalAblation_2.doc	100KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestToolsOptions_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewBlankUnblank_1.doc	65KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewDisplaySettings_1.doc	252KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewOrientation_1.doc	41KB	Microsoft Word Doc...	9/18/01 7:12 AM

210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer

FIG. 25

Exploring -D:\FEM Builder 1.2\Doc\Test			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
FEMBuilderTestStandardHeat1.doc	47KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardHTAxisym1.doc	50KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardNozzle1.doc	38KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneE1.doc	25KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneE2.doc	30KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneS1.doc	25KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardPlaneS2.doc	30KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardSolid1L.doc	26KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardSolid1Q.doc	27KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestStandardSolidCFD1.doc	36KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestSubModel_1.doc	53KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestSubModel_2.doc	51KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestSubModel_3.doc	54KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestThermalAblation_1.doc	68KB	Microsoft Word Doc...	9/18/01 12:26 PM
FEMBuilderTestThermalAblation_2.doc	100KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestToolsOptions_1.doc	28KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewBlankUnblank_1.doc	65KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewDisplaySettings_1.doc	252KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewOrientation_1.doc	41KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewOrientation_2.doc	228KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewOrientation_3.doc	69KB	Microsoft Word Doc...	9/18/01 7:12 AM
FEMBuilderTestViewScreenOptions_1.doc	59KB	Microsoft Word Doc...	9/18/01 7:12 AM

210 object(s) 13.6MB (Disk free space: 0 bytes) My Computer

FIG. 26

16/48

Exploring -D:\FEM Builder 1.2\Doc\User

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
FEMBuilderPython.doc	410KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderSolvers.doc	23KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderSolversLess2D.doc	400KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderTraining.doc	597KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUser.doc	111KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAbaqusInterface.doc	54KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAnsysInterface.doc	51KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAppendixAbaqusSupport.doc	111KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAppendixAnsysSupport.doc	173KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAppendixElementLibrary.doc	256KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAppendixMatProperties.doc	40KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAppendixSelection.doc	65KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserAscharInterface.doc	24KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserCDCA-CCMInterface.doc	39KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserChemicalProperties.doc	25KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserCreateFEM.doc	102KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserCreateGeometry.doc	38KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserDeleteFEM.doc	25KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserDeleteGeometry.doc	25KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserEditFEM.doc	46KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserEditGeometry.doc	32KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserExecution.doc	48KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserFluentInterface.doc	43KB	Microsoft Word Doc...	9/17/01 11:34 AM

44 object(s) 3.98MB (Disk free space: 0 bytes) My Computer

FIG. 27

Exploring -D:\FEM Builder 1.2\Doc\User

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
FEMBuilderUserFluentInterface.doc	43KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserGridGenInterface.doc	23KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserIdeasMSInterface.doc	30KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserIntroduction.doc	43KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserListFEM.doc	25KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserListGeometry.doc	26KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserMaterialProperties.doc	29KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserMeshGeneration.doc	148KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserOverview.doc	41KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserPatranInterface.doc	64KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserPostFractureMechanics.doc	181KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserPostResultCalculation.doc	28KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserPostResultDisplay.doc	40KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserPostXYPlotParameters.doc	27KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserReadSharpInterface.doc	26KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserRecessInterface.doc	45KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserSindalInterface.doc	42KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserSinGenInterface.doc	23KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserTexChemInterface.doc	24KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserThermalAblation.doc	306KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserTools.doc	151KB	Microsoft Word Doc...	9/17/01 11:34 AM
FEMBuilderUserView.doc	30KB	Microsoft Word Doc...	9/17/01 11:34 AM

44 object(s) 3.98MB (Disk free space: 0 bytes) My Computer

FIG. 28

17/48

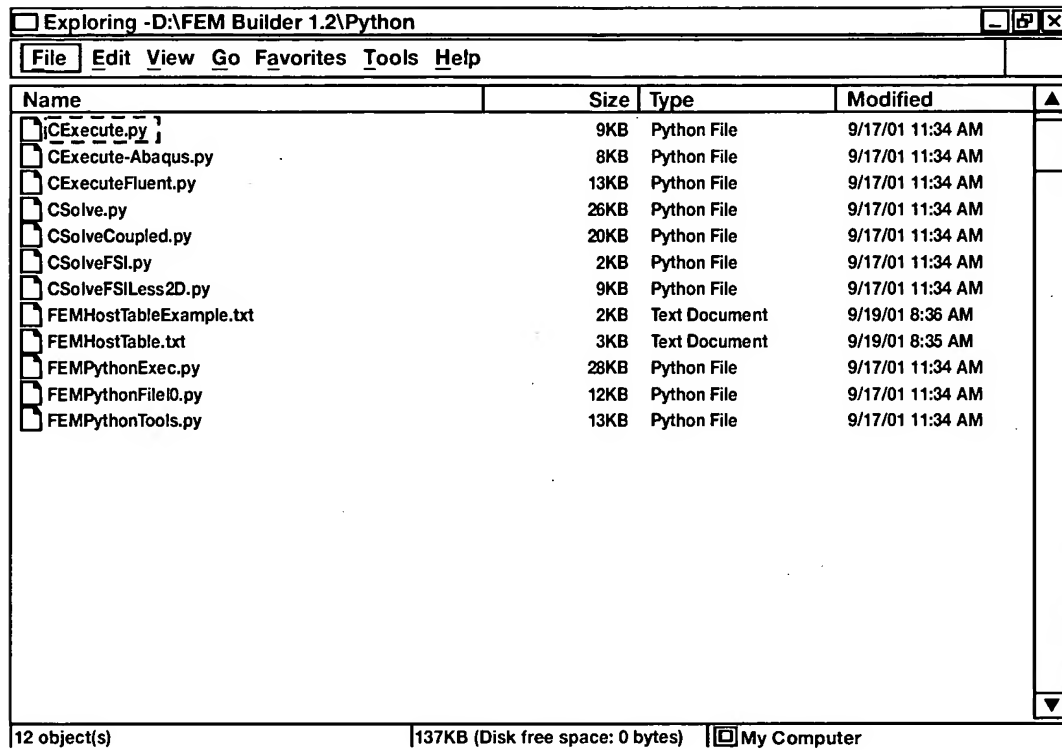


FIG. 29

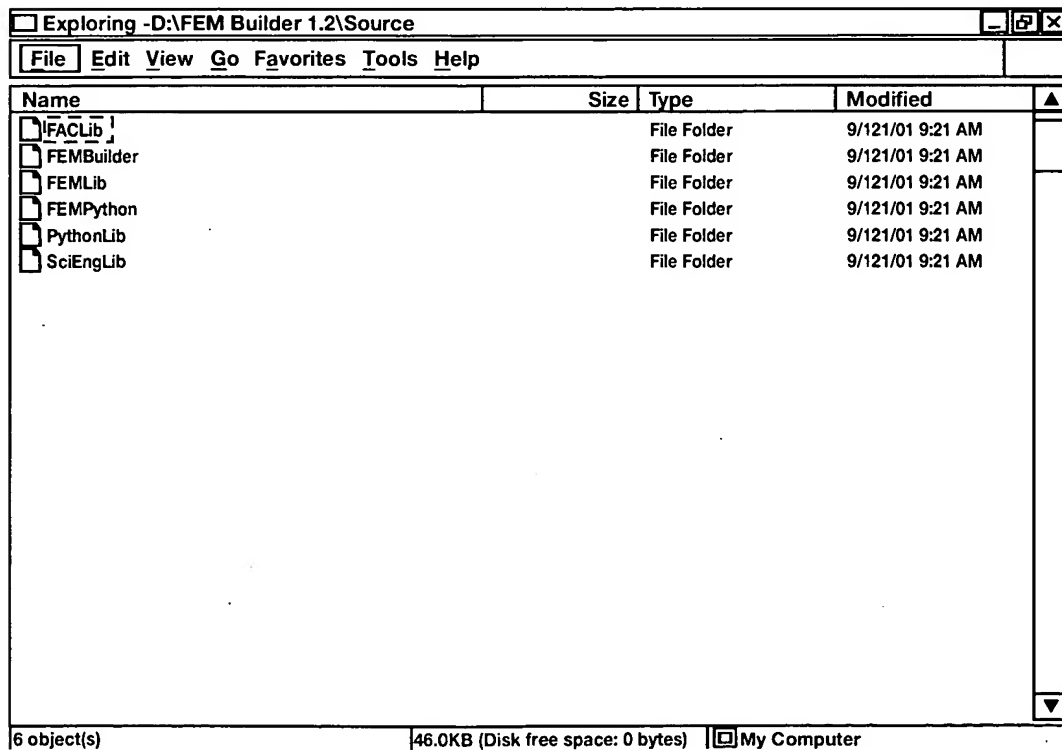


FIG. 30

18/48

Exploring -D:\FEM Builder 1.2\Source\FACLib			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
ArbArray.hpp	10KB	HPP File	9/17/01 11:30 AM
ArbBdrySeg.hpp	6KB	HPP File	9/17/01 11:30 AM
ArbBSpline2D.cpp	24KB	CPP File	9/17/01 11:30 AM
ArbBSpline2D.hpp	8KB	HPP File	9/17/01 11:30 AM
ArbCoord2D.hpp	12KB	HPP File	9/17/01 11:30 AM
ArbFeasableRegion.cpp	10KB	CPP File	9/17/01 11:30 AM
ArbFeasableRegion.hpp	5KB	HPP File	9/17/01 11:30 AM
ArbGeom2DMixIn.cpp	10KB	CPP File	9/17/01 11:30 AM
ArbGeom2DMixIn.hpp	2KB	HPP File	9/17/01 11:30 AM
ArbHashTable.hpp	35KB	HPP File	9/17/01 11:30 AM
ArbHeap.hpp	16KB	HPP File	9/17/01 11:30 AM
ArbKdTree2D.cpp	16KB	CPP File	9/17/01 11:30 AM
ArbKdTree2D.hpp	9KB	HPP File	9/17/01 11:30 AM
ArbMsh.hpp	5KB	HPP File	9/17/01 11:30 AM
ArbMshCleanup.cpp	31KB	CPP File	9/17/01 11:30 AM
ArbMshCrackRegion2D.cpp	68KB	CPP File	9/17/01 11:30 AM
ArbMshCrackRegion2D.hpp	50KB	HPP File	9/17/01 11:30 AM
ArbMshEdgeList.cpp	86KB	CPP File	9/17/01 11:30 AM
ArbMshEdgeList.hpp	28KB	HPP File	9/17/01 11:30 AM
ArbMshQuad2D.cpp	179KB	CPP File	9/17/01 11:30 AM
ArbMshRegion2D.cpp	102KB	CPP File	9/17/01 11:30 AM
ArbMshRegion2D.hpp	62KB	HPP File	9/17/01 11:30 AM
ArbMshSmooth2D.cpp	51KB	CPP File	9/17/01 11:30 AM

37 object(s) 133MB (Disk free space: 0 bytes) My Computer

FIG. 31

Exploring -D:\FEM Builder 1.2\Source\FACLib			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
ArbMshCrackRegion2D.cpp	68KB	CPP File	9/17/01 11:30 AM
ArbMshCrackRegion2D.hpp	50KB	HPP File	9/17/01 11:30 AM
ArbMshEdgeList.cpp	86KB	CPP File	9/17/01 11:30 AM
ArbMshEdgeList.hpp	28KB	HPP File	9/17/01 11:30 AM
ArbMshQuad2D.cpp	179KB	CPP File	9/17/01 11:30 AM
ArbMshRegion2D.cpp	102KB	CPP File	9/17/01 11:30 AM
ArbMshRegion2D.hpp	62KB	HPP File	9/17/01 11:30 AM
ArbMshSmooth2D.cpp	51KB	CPP File	9/17/01 11:30 AM
ArbMshSmooth2D.hpp	18KB	HPP File	9/17/01 11:30 AM
ArbMshTopo2D.cpp	92KB	CPP File	9/17/01 11:30 AM
ArbMshTopo2D.hpp	54KB	HPP File	9/17/01 11:30 AM
ArbQuadTree.cpp	26KB	CPP File	9/17/01 11:30 AM
ArbQuadTree.hpp	14KB	HPP File	9/17/01 11:30 AM
ArbQueue.hpp	6KB	HPP File	9/17/01 11:30 AM
ArbRectangle.hpp	3KB	HPP File	9/17/01 11:30 AM
ArbRmshRegion2D.cpp	286KB	CPP File	9/17/01 11:30 AM
ArbRmshRegion2D.hpp	15KB	HPP File	9/17/01 11:30 AM
ArbSet.cpp	26KB	CPP File	9/17/01 11:30 AM
ArbSet.hpp	8KB	HPP File	9/17/01 11:30 AM
ArbSmallSet.hpp	4KB	HPP File	9/17/01 11:30 AM
FACLib.dsp	6KB	DSP File	9/17/01 11:30 AM
FACLib.dsw	1KB	DSW File	9/17/01 11:30 AM

37 object(s) 1.33MB (Disk free space: 0 bytes) My Computer

FIG. 32

19/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
ires_1		File Folder	9/21/01 9:21 AM
CCoordinateInput.cpp	9KB	CPP File	9/17/01 11:31 AM
CCoordinateInput.h	2KB	H File	9/17/01 11:31 AM
CFemDBUtil.cpp	8KB	CPP File	9/17/01 11:31 AM
CFemDBUtil.h	1KB	H File	9/17/01 11:31 AM
CGridControl.cpp	13KB	CPP File	9/17/01 11:31 AM
CGridControl.h	4KB	H File	9/17/01 11:31 AM
CGridInput.cpp	15KB	CPP File	9/17/01 11:31 AM
CGridInput.h	6KB	H File	9/17/01 11:31 AM
CheckCoincidenceDlg.cpp	6KB	CPP File	9/17/01 11:31 AM
CheckCoincidenceDlg.h	4KB	H File	9/17/01 11:31 AM
CheckDistortionDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
CheckDistortionDlg.h	2KB	H File	9/17/01 11:31 AM
ChildFrm.cpp	2KB	CPP File	9/17/01 11:31 AM
ChildFrm.h	2KB	H File	9/17/01 11:31 AM
CListFileMFC.cpp	3KB	CPP File	9/17/01 11:31 AM
CListFileMFC.h	2KB	H File	9/17/01 11:31 AM
ColorDlg.cpp	9KB	CPP File	9/17/01 11:31 AM
ColorDlg.h	3KB	H File	9/17/01 11:31 AM
CopyMatPropertyDlg.cpp	8KB	CPP File	9/17/01 11:31 AM
CopyMatPropertyDlg.h	3KB	H File	9/17/01 11:31 AM
CreateArcDlg.cpp	14KB	CPP File	9/17/01 11:31 AM
CreateArcDlg.h	3KB	H File	9/17/01 11:31 AM
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer			

FIG. 33

Exploring -D:\FEM Builder 1.2\Source\FemBuilder			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
CreateBCDlg.h	11KB	H File	9/17/01 11:31 AM
CreateBCFluid.cpp	22KB	CPP File	9/17/01 11:31 AM
CreateBCFluid.h	9KB	H File	9/17/01 11:31 AM
CreateBCInterpolateDlg.cpp	11KB	CPP File	9/18/01 12:26 PM
CreateBCInterpolateDlg.h	4KB	H File	9/17/01 11:31 AM
CreateBCIsentropicDlg.cpp	6KB	CPP File	9/17/01 11:31 AM
CreateBCIsentropicDlg.h	3KB	H File	9/17/01 11:31 AM
CreateBCTabular.cpp	9KB	CPP File	9/17/01 11:31 AM
CreateBCTabular.h	3KB	H File	9/17/01 11:31 AM
CreateChemReactionDlg.cpp	5KB	CPP File	9/17/01 11:31 AM
CreateChemReactionDlg.h	2KB	H File	9/17/01 11:31 AM
CreateChemSpeciesDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
CreateChemSpeciesDlg.h	2KB	H File	9/17/01 11:31 AM
CreateCircleDlg.cpp	10KB	CPP File	9/17/01 11:31 AM
CreateCircleDlg.h	3KB	H File	9/17/01 11:31 AM
CreateConstraintDlg.cpp	9KB	CPP File	9/17/01 11:31 AM
CreateConstraintDlg.h	4KB	H File	9/17/01 11:31 AM
CreateCurveOffsetDlg.cpp	6KB	CPP File	9/17/01 11:31 AM
CreateCurveOffsetDlg.h	3KB	H File	9/17/01 11:31 AM
CreateGroupDlg.cpp	9KB	CPP File	9/17/01 11:31 AM
CreateGroupDlg.h	3KB	H File	9/17/01 11:31 AM
CreateInitialConditionsDlg.cpp	22KB	CPP File	9/17/01 11:31 AM
CreateInitialConditionsDlg.h	8KB	H File	9/17/01 11:31 AM
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer			

FIG. 34

20/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
CreateLineDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateNodeDlg.cpp	2KB	CPP File	9/17/01 11:31 AM	
CreateNodeDlg.h	2KB	H File	9/17/01 11:31 AM	
CreatePointBetweenDlg.cpp	12KB	CPP File	9/17/01 11:31 AM	
CreatePointBetweenDlg.h	3KB	H File	9/17/01 11:31 AM	
CreatePointCoordinateDlg.cpp	6KB	CPP File	9/17/01 11:31 AM	
CreatePointCoordinateDlg.h	3KB	H File	9/17/01 11:31 AM	
CreatePointOnCurveDlg.cpp	15KB	CPP File	9/17/01 11:31 AM	
CreatePointOnCurveDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateSplineDlg.cpp	18KB	CPP File	9/17/01 11:31 AM	
CreateSplineDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateSurfaceBoundaryDlg.cpp	8KB	CPP File	9/17/01 11:31 AM	
CreateSurfaceBoundaryDlg.h	2KB	H File	9/17/01 11:31 AM	
CreateSurfaceExtrudeDlg.cpp	13KB	CPP File	9/17/01 11:31 AM	
CreateSurfaceExtrudeDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateSurfaceRevolveDlg.cpp	12KB	CPP File	9/17/01 11:31 AM	
CreateSurfaceRevolveDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateSurfaceSweepDlg.cpp	7KB	CPP File	9/17/01 11:31 AM	
CreateSurfaceSweepDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateSystemDlg.cpp	12KB	CPP File	9/17/01 11:31 AM	
CopySystemDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateVolumeBoundaryDlg.cpp	6KB	CPP File	9/17/01 11:31 AM	
CreateVolumeBoundaryDlg.h	2KB	H File	9/17/01 11:31 AM	
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer				

FIG. 35

Exploring -D:\FEM Builder 1.2\Source\FemBuilder				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
CreateVolumeExtrudeDlg.cpp	11KB	CPP File	9/17/01 11:31 AM	
CreateVolumeExtrudeDlg.h	3KB	H File	9/17/01 11:31 AM	
CreateVolumeRevolveDlg.cpp	10KB	CPP File	9/17/01 11:31 AM	
CreateVolumeRevolveDlg.h	3KB	H File	9/18/01 12:26 PM	
CreateVolumeSweepDlg.cpp	2KB	CPP File	9/17/01 11:31 AM	
CreateVolumeSweepDlg.h	2KB	H File	9/17/01 11:31 AM	
CWizardPage.cpp	2KB	CPP File	9/17/01 11:31 AM	
CWizardPage.h	2KB	H File	9/17/01 11:31 AM	
CWizardSheet.cpp	10KB	CPP File	9/17/01 11:31 AM	
CWizardSheet.h	2KB	H File	9/17/01 11:31 AM	
DefineVectorDlg.cpp	14KB	CPP File	9/17/01 11:31 AM	
DefineVectorDlg.h	3KB	H File	9/17/01 11:31 AM	
DeformMeshDlg.cpp	4KB	CPP File	9/17/01 11:31 AM	
DeformMeshDlg.h	2KB	H File	9/17/01 11:31 AM	
DisplayOptionDlg.cpp	25KB	CPP File	9/17/01 3:00 PM	
DisplayOptionDlg.h	8KB	H File	9/17/01 11:31 AM	
EditBCCColorDlg.cpp	6KB	CPP File	9/17/01 11:31 AM	
EditBCCColorDlg.h	3KB	H File	9/17/01 11:31 AM	
EditColorPS.cpp	9KB	CPP File	9/17/01 11:31 AM	
EditColorPS.h	3KB	H File	9/17/01 11:31 AM	
EditCurveSplitDlg.cpp	11KB	CPP File	9/17/01 11:31 AM	
EditCurveSplitDlg.h	3KB	H File	9/17/01 11:31 AM	
EditCurveSubdivisionDlg.cpp	9KB	CPP File	9/17/01 11:31 AM	
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer				

FIG. 36

21/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
EditCurveSubdivision.Dlg.h	3KB	H File	9/17/01 11:31 AM
EditCurveTrim.Dlg.cpp	9KB	CPP File	9/17/01 11:31 AM
EditCurveTrim.Dlg.h	3KB	H File	9/17/01 11:31 AM
EditElementAttributesDlg.cpp	14KB	CPP File	9/17/01 11:31 AM
EditElementAttributesDlg.h	4KB	H File	9/17/01 11:31 AM
EditElementDlg.cpp	18KB	CPP File	9/17/01 11:31 AM
EditElementDlg.h	4KB	H File	9/17/01 11:31 AM
EditElementOrientDlg.cpp	46KB	CPP File	9/17/01 11:31 AM
EditElementOrientDlg.h	15KB	H File	9/17/01 11:31 AM
EditGravityDlg.cpp	2KB	CPP File	9/17/01 11:31 AM
EditGravityDlg.h	2KB	H File	9/17/01 11:31 AM
EditMeshAttributeDlg.cpp	6KB	CPP File	9/17/01 11:31 AM
EditMeshAttributeDlg.h	3KB	H File	9/17/01 11:31 AM
EditMultipleElementsDlg.cpp	2KB	CPP File	9/17/01 11:31 AM
EditMultipleElementsDlg.h	2KB	H File	9/17/01 11:31 AM
EditNodeDlg.cpp	11KB	CPP File	9/17/01 11:31 AM
EditNodeDlg.h	3KB	H File	9/17/01 11:31 AM
EditNodeDSystemDlg.cpp	6KB	CPP File	9/17/01 11:31 AM
EditNodeDSystemDlg.h	3KB	H File	9/17/01 11:31 AM
EditWorkPlaneDlg.cpp	10KB	CPP File	9/17/01 11:31 AM
EditWorkPlaneDlg.h	3KB	H File	9/17/01 11:31 AM
EditWorkPlaneMoveDlg.cpp	11KB	CPP File	9/17/01 11:31 AM
EditWorkPlaneMoveDlg.h	3KB	H File	9/17/01 11:31 AM

320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer

FIG. 37

Exploring -D:\FEM Builder 1.2\Source\FemBuilder

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
error.wav	25KB	Wave Sound	8/3/96 1:00 AM
ExecuteAbaqusDlg.cpp	6KB	CPP File	9/17/01 11:31 AM
ExecuteAbaqusDlg.h	3KB	H File	9/17/01 11:31 AM
ExecuteFluentDlg.cpp	8KB	CPP File	9/17/01 11:31 AM
ExecuteFluentDlg.h	3KB	H File	9/17/01 11:31 AM
ExecuteParameterPP.cpp	20KB	CPP File	9/17/01 11:31 AM
ExecuteParameterPP.h	5KB	H File	9/17/01 11:31 AM
Fem.aps	621KB	APS File	9/20/01 10:36 AM
Fem.cpp	16KB	CPP File	9/20/01 11:07 AM
Fem.dsp	30KB	DSP File	9/17/01 11:31 AM
Fem.dsw	2KB	DSW File	9/17/01 11:31 AM
Fem.h	3KB	H File	9/20/01 10:37 AM
Fem.rc	353KB	RC File	9/20/01 11:36 AM
FemDoc.cpp	44KB	CPP File	9/17/01 11:31 AM
FemDoc.h	17KB	H File	9/17/01 11:31 AM
FemDocBlank.cpp	4KB	CPP File	9/17/01 11:31 AM
FemDocCreateBC.cpp	11KB	CPP File	9/17/01 11:31 AM
FemDocDelete.cpp	8KB	CPP File	9/17/01 11:31 AM
FemDocEditBC.cpp	2KB	CPP File	9/17/01 11:31 AM
FemDocFEM.cpp	3KB	CPP File	9/17/01 11:31 AM
FemDocGeometry.cpp	9KB	CPP File	9/17/01 11:31 AM
FemDocInterfaces.cpp	6KB	CPP File	9/17/01 11:31 AM
FemDocList.cpp	10KB	CPP File	9/17/01 11:31 AM

320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer

FIG. 38

22/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
FemDocMatProp.cpp	6KB	CPP File	9/17/01 11:31 AM
FemDocOrient.cpp	1KB	CPP File	9/17/01 11:31 AM
FemDocPost.cpp	4KB	CPP File	9/17/01 11:31 AM
FemDocTools.cpp	4KB	CPP File	9/17/01 11:31 AM
FemUserMessage.h	1KB	H File	9/17/01 11:31 AM
FemView.cpp	52KB	CPP File	9/21/01 7:06 AM
FemView.h	11KB	H File	9/17/01 11:31 AM
FilterOptionsDlg.cpp	5KB	CPP File	9/17/01 11:31 AM
FilterOptionsDlg.h	2KB	H File	9/17/01 11:31 AM
FlowModelParameters.cpp	17KB	CPP File	9/17/01 11:31 AM
FlowModelParameters.h	5KB	H File	9/17/01 11:31 AM
FractureMechanicsDlg.cpp	4KB	CPP File	9/17/01 11:31 AM
FractureMechanicsDlg.h	2KB	H File	9/17/01 11:31 AM
GPropertySheetFun.cpp	3KB	CPP File	9/17/01 11:31 AM
GPropertySheetFun.h	1KB	H File	9/17/01 11:31 AM
Insert2DFlawDlg.cpp	15KB	CPP File	9/17/01 11:31 AM
Insert2DFlawDlg.h	5KB	H File	9/17/01 11:31 AM
Insert2DFlawEllipseDlg.cpp	8KB	CPP File	9/17/01 11:31 AM
Insert2DFlawEllipseDlg.h	2KB	H File	9/17/01 11:31 AM
Interface.cpp	41KB	CPP File	9/17/01 11:31 AM
Interface.h	3KB	H File	9/17/01 11:31 AM
InterpolateProjectionDlg.cpp	9KB	CPP File	9/17/01 11:31 AM
InterpolateProjectionDlg.h	3KB	H File	9/17/01 11:31 AM
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer			

FIG. 39

Exploring -D:\FEM Builder 1.2\Source\FemBuilder			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
listFileDlg.cpp	5KB	CPP File	8/3/96 1:00 AM
listFileDlg.h	2KB	H File	9/17/01 11:31 AM
ListResultValuesDlg.cpp	7KB	CPP File	9/17/01 11:31 AM
ListResultValuesDlg.h	3KB	H File	9/17/01 11:31 AM
MainFrm.cpp	17KB	CPP File	9/20/01 10:37 AM
MainFrm.h	3KB	H File	9/17/01 11:31 AM
MaterialPropertyDlg.cpp	20KB	CPP File	9/17/01 11:31 AM
MaterialPropertyDlg.h	5KB	H File	9/20/01 10:36 AM
MeshDlg.cpp	42KB	CPP File	9/20/01 11:07 AM
MeshDlg.h	10KB	H File	9/17/01 11:31 AM
ModelFileNamePR.cpp	12KB	CPP File	9/17/01 11:31 AM
ModelFileNamePR.h	4KB	H File	9/20/01 10:37 AM
ModelInfoDlg.cpp	17KB	CPP File	9/20/01 11:36 AM
ModelInfoDlg.h	6KB	H File	9/17/01 11:31 AM
MoveCopyDlg.cpp	34KB	CPP File	9/17/01 11:31 AM
MoveCopyDlg.h	10KB	H File	9/17/01 11:31 AM
OptionsDlg.cpp	21KB	CPP File	9/18/01 12:26 PM
OptionsDlg.h	9KB	H File	9/17/01 11:31 AM
OrientViewDlg.cpp	6KB	CPP File	9/21/01 7:06 AM
OrientViewDlg.h	4KB	H File	9/17/01 11:31 AM
PostContourDlg.cpp	17KB	CPP File	9/17/01 11:31 AM
PostContourDlg.h	4KB	H File	9/17/01 11:31 AM
PostDeformedDlg.cpp	13KB	CPP File	9/17/01 11:31 AM
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer			

FIG. 40

23/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
PostDeformedDlg.h	3KB	H File	9/17/01 11:31 AM
PostDlg.cpp	33KB	CPP File	9/21/01 7:06 AM
PostDlg.h	11KB	H File	9/17/01 11:31 AM
PostVectorDlg.cpp	17KB	CPP File	9/17/01 11:31 AM
PostVectorDlg.h	4KB	H File	9/17/01 11:31 AM
PostView.cpp	15KB	CPP File	9/21/01 7:06 AM
PostView.h	4KB	H File	9/17/01 11:31 AM
PostXYAnalysisResultDlg.cpp	30KB	CPP File	9/17/01 11:31 AM
PostXYAnalysisResultDlg.h	7KB	H File	9/17/01 11:31 AM
PostXYPlotParmDlg.cpp	35KB	CPP File	9/17/01 11:31 AM
PostXYPlotParmDlg.h	9KB	H File	9/17/01 11:31 AM
PostXYPlotViewDlg.cpp	2KB	CPP File	9/17/01 11:31 AM
PostXYPlotViewDlg.h	2KB	H File	9/17/01 11:31 AM
PostXYTimeHistoryDlg.cpp	21KB	CPP File	9/17/01 11:31 AM
PostXYTimeHistoryDlg.h	4KB	H File	9/17/01 11:31 AM
ReadAbaqusDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
ReadAbaqusDlg.h	2KB	H File	9/17/01 11:31 AM
ReadAnsysDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
ReadAnsysDlg.h	2KB	H File	9/17/01 11:31 AM
ReadAscharDlg.cpp	4KB	CPP File	9/17/01 11:31 AM
ReadAscharDlg.h	3KB	H File	9/17/01 11:31 AM
ReadCCMDlg.cpp	4KB	CPP File	9/17/01 11:31 AM
ReadCMMDlg.h	3KB	H File	9/17/01 11:31 AM

320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer

FIG. 41

Exploring -D:\FEM Builder 1.2\Source\FemBuilder

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
ReadCDCADlg.cpp	4KB	CPP File	9/17/01 11:31 AM
ReadCDCADlg.h	3KB	H File	9/17/01 11:31 AM
ReadFluentDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
ReadFluentDlg.h	2KB	H File	9/17/01 11:31 AM
ReadGridGenDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
ReadGridGenDlg.h	2KB	H File	9/17/01 11:31 AM
ReadIdeasMsDlg.cpp	3KB	CPP File	9/17/01 11:31 AM
ReadIdeasMsDlg.h	2KB	H File	9/17/01 11:31 AM
ReadPatranDlg.cpp	8KB	CPP File	9/17/01 11:32 AM
ReadPatranDlg.h	3KB	H File	9/17/01 11:32 AM
ReadRecessDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
ReadRecessDlg.h	2KB	H File	9/17/01 11:32 AM
ReadSharpDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
ReadSharpDlg.h	2KB	H File	9/17/01 11:32 AM
ReadSindaDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
ReadSindaDlg.h	2KB	H File	9/17/01 11:32 AM
ReadSinGenDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
ReadSinGenDlg.h	2KB	H File	9/17/01 11:32 AM
ReadTexChemDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
ReadTexChemDlg.h	2KB	H File	9/17/01 11:32 AM
RefineMeshAdaptiveDlg.cpp	19KB	CPP File	9/20/01 10:38 AM
RefineMeshAdaptiveDlg.h	5KB	H File	9/17/01 11:32 AM
RefineMeshSpecifiedDlg.cpp	8KB	CPP File	9/17/01 11:32 AM

320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer

FIG. 42

24/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
RefineMeshSpecifiedDlg.h	3KB	H File	9/17/01 11:32 AM
resource.fd	56KB	FD File	9/20/01 10:36 AM
resource.h	39KB	H File	9/20/01 10:36 AM
ResultInterpolationDlg.cpp	13KB	CPP File	9/17/01 11:32 AM
ResultInterpolationDlg.h	5KB	H File	9/17/01 11:32 AM
ResultSuperpositonDlg.cpp	6KB	CPP File	9/17/01 11:32 AM
ResultSuperpositonDlg.h	3KB	H File	9/17/01 11:32 AM
SaveViewOrientationDlg.cpp	2KB	CPP File	9/17/01 11:32 AM
SaveViewOrientationDlg.h	2KB	H File	9/17/01 11:32 AM
SelectBCDlg.cpp	9KB	CPP File	9/17/01 11:32 AM
SelectBCDlg.h	3KB	H File	9/17/01 11:32 AM
SelectBCSetsDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
SelectBCSetsDlg.h	2KB	H File	9/17/01 11:32 AM
SelectCurveDlg.cpp	9KB	CPP File	9/17/01 11:32 AM
SelectCurveDlg.h	3KB	H File	9/17/01 11:32 AM
SelectDlg.cpp	9KB	CPP File	9/17/01 11:32 AM
SelectDlg.h	5KB	H File	9/17/01 11:32 AM
SelectElementDlg.cpp	13KB	CPP File	9/17/01 11:32 AM
SelectElementDlg.h	3KB	H File	9/17/01 11:32 AM
SelectFaceDlg.cpp	8KB	CPP File	9/17/01 11:32 AM
SelectFaceDlg.h	2KB	H File	9/17/01 11:32 AM
SelectGroupDlg.cpp	8KB	CPP File	9/17/01 11:32 AM
SelectGroupDlg.h	3KB	H File	9/17/01 11:32 AM
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer			

FIG. 43

Exploring -D:\FEM Builder 1.2\Source\FemBuilder			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
SelectMaterialDlg.cpp	8KB	CPP File	9/17/01 11:32 AM
SelectMaterialDlg.h	3KB	H File	9/17/01 11:32 AM
SelectMaterialDsDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
SelectMaterialDsDlg.h	2KB	H File	9/17/01 11:32 AM
SelectModelDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
SelectModelDlg.h	2KB	H File	9/17/01 11:32 AM
SelectNodeDlg.cpp	13KB	CPP File	9/17/01 11:32 AM
SelectNodeDlg.h	3KB	H File	9/17/01 11:32 AM
SelectPointDlg.cpp	9KB	CPP File	9/17/01 11:32 AM
SelectPointDlg.h	3KB	H File	9/17/01 11:32 AM
SelectReactionsDlg.cpp	4KB	CPP File	9/17/01 11:32 AM
SelectReactionsDlg.h	2KB	H File	9/17/01 11:32 AM
SelectResultDlg.cpp	16KB	CPP File	9/17/01 11:32 AM
SelectResultDlg.h	4KB	H File	9/17/01 11:32 AM
SelectSpeciesDlg.cpp	4KB	CPP File	9/17/01 11:32 AM
SelectSpeciesDlg.h	2KB	H File	9/17/01 11:32 AM
SelectSurfaceByTypeDlg.cpp	3KB	CPP File	9/17/01 11:32 AM
SelectSurfaceByTypeDlg.h	2KB	H File	9/17/01 11:32 AM
SelectSurfaceDlg.cpp	10KB	CPP File	9/17/01 11:32 AM
SelectSurfaceDlg.h	3KB	H File	9/17/01 11:32 AM
SelectSystemDlg.cpp	6KB	CPP File	9/17/01 11:32 AM
SelectSystemDlg.h	2KB	H File	9/17/01 11:32 AM
SelectVolumeDlg.cpp	9KB	CPP File	9/17/01 11:32 AM
320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer			

FIG. 44

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.IUS

25/48

Exploring -D:\FEM Builder 1.2\Source\FemBuilder

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
SelectVolumeDlg.h	3KB	H File	9/17/01 11:32 AM
SmoothMeshDlg.cpp	7KB	CPP File	9/17/01 11:32 AM
SmoothMeshDlg.h	3KB	H File	9/17/01 11:32 AM
SplashWnd.cpp	4KB	CPP File	9/17/01 11:32 AM
SplashWnd.h	2KB	H File	9/17/01 11:32 AM
Splsh16.bmp	81KB	Bitmap Image	9/17/01 11:32 AM
StdAfx.cpp	1KB	CPP File	9/17/01 11:32 AM
StdAfx.h	2KB	H File	9/17/01 11:32 AM
SubModelDlg.cpp	11KB	CPP File	9/17/01 11:32 AM
SubModelDlg.h	4KB	H File	9/17/01 11:32 AM
SweepDlg.cpp	8KB	CPP File	9/17/01 11:32 AM
SweepDlg.h	3KB	H File	9/17/01 11:32 AM
ThermalAblationDlg.cpp	12KB	CPP File	9/17/01 11:32 AM
ThermalAblationDlg.h	4KB	H File	9/17/01 11:32 AM
TranslateDlg.cpp	2KB	CPP File	9/17/01 11:32 AM
TranslateDlg.h	2KB	H File	9/17/01 11:32 AM
UnitSystemPR.cpp	6KB	CPP File	9/17/01 11:32 AM
UnitSystemPR.h	2KB	H File	9/17/01 11:32 AM
WriteAbaqusDlg.cpp	18KB	CPP File	9/17/01 11:32 AM
WriteAbaqusDlg.h	7KB	H File	9/17/01 11:32 AM
WriteAnsysDlg.cpp	2KB	CPP File	9/17/01 11:32 AM
WriteAnsysDlg.h	2KB	H File	9/17/01 11:32 AM
WriteCCMDlg.cpp	8KB	CPP File	9/17/01 3:00 PM

320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer

FIG. 45

Exploring -D:\FEM Builder 1.2\Source\FemBuilder

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
WriteAnsysDlg.cpp	2KB	CPP File	9/17/01 11:32 AM
WriteAnsysDlg.h	2KB	H File	9/17/01 11:32 AM
WriteCCMDlg.cpp	8KB	CPP File	9/17/01 3:00 PM
WriteCCMDlg.h	3KB	H File	9/17/01 11:32 AM
WriteCDCADlg.cpp	8KB	CPP File	9/17/01 3:00 PM
WriteCDCADlg.h	3KB	H File	9/17/01 11:32 AM
WriteFluentDlg.cpp	22KB	CPP File	9/17/01 11:32 AM
WriteFluentDlg.h	9KB	H File	9/17/01 11:32 AM
WriteIdeasMSDlg.cpp	7KB	CPP File	9/17/01 11:32 AM
WriteIdeasMSDlg.h	3KB	H File	9/17/01 11:32 AM
WritePatranDlg.cpp	6KB	CPP File	9/17/01 11:32 AM
WritePatranDlg.h	3KB	H File	9/17/01 11:32 AM
WriteRecessDlg.cpp	26KB	CPP File	9/17/01 11:32 AM
WriteRecessDlg.h	7KB	H File	9/17/01 11:32 AM
WriteSindaDlg.cpp	14KB	CPP File	9/17/01 11:32 AM
WriteSindaDlg.h	6KB	H File	9/17/01 11:32 AM
WriteTexChem.cpp	7KB	CPP File	9/17/01 11:32 AM
WriteTexChem.h	4KB	H File	9/17/01 11:32 AM
XYPlotParmDlg.cpp	40KB	CPP File	9/21/01 7:06 AM
XYPlotParmDlg.h	9KB	H File	9/17/01 11:32 AM
XYPlotView.cpp	48KB	CPP File	9/21/01 7:06 AM
XYPlotView.h	8KB	H File	9/17/01 11:32 AM

320 object(s) 3.31MB (Disk free space: 0 bytes) My Computer

FIG. 46

26/48

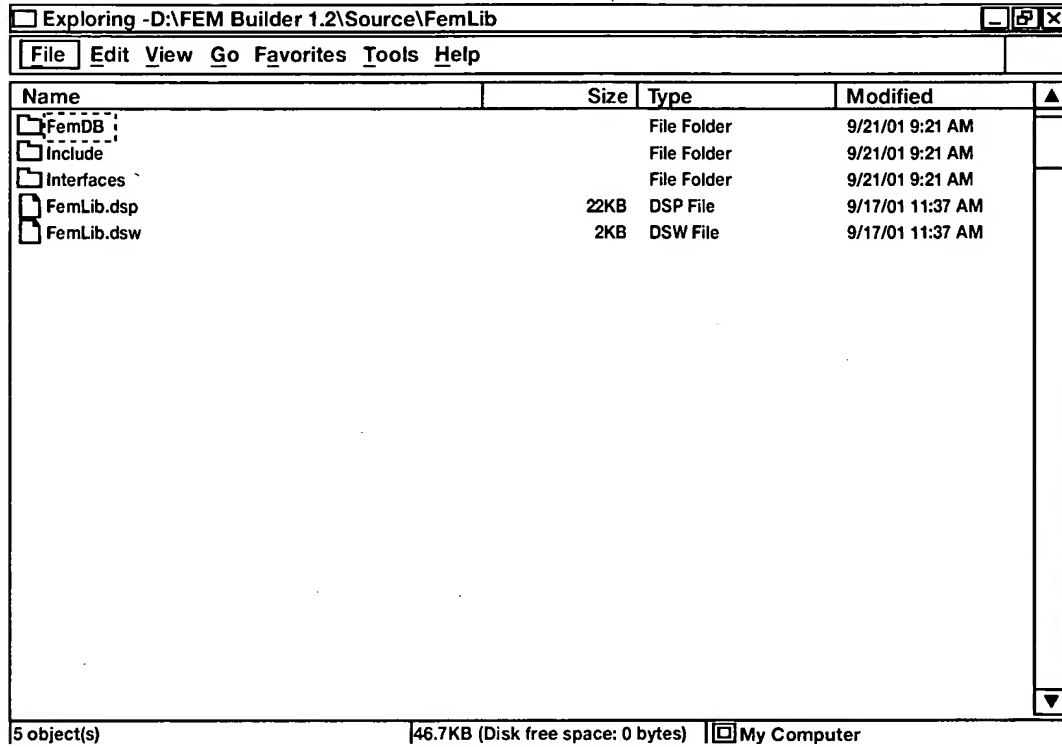


FIG. 47

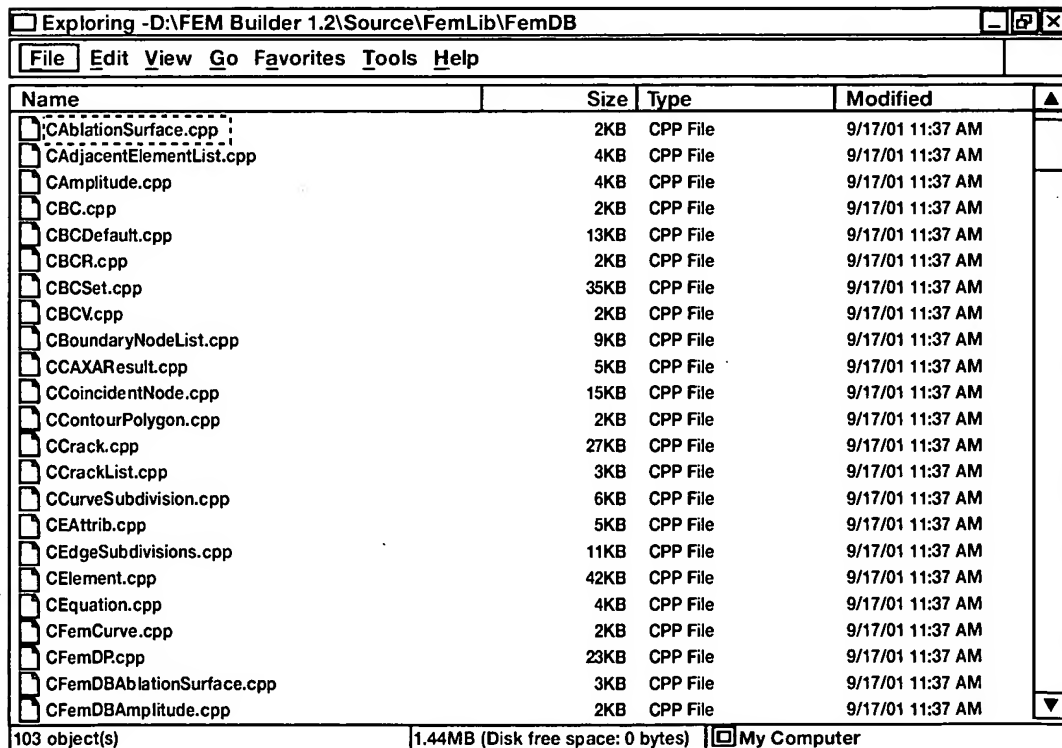


FIG. 48

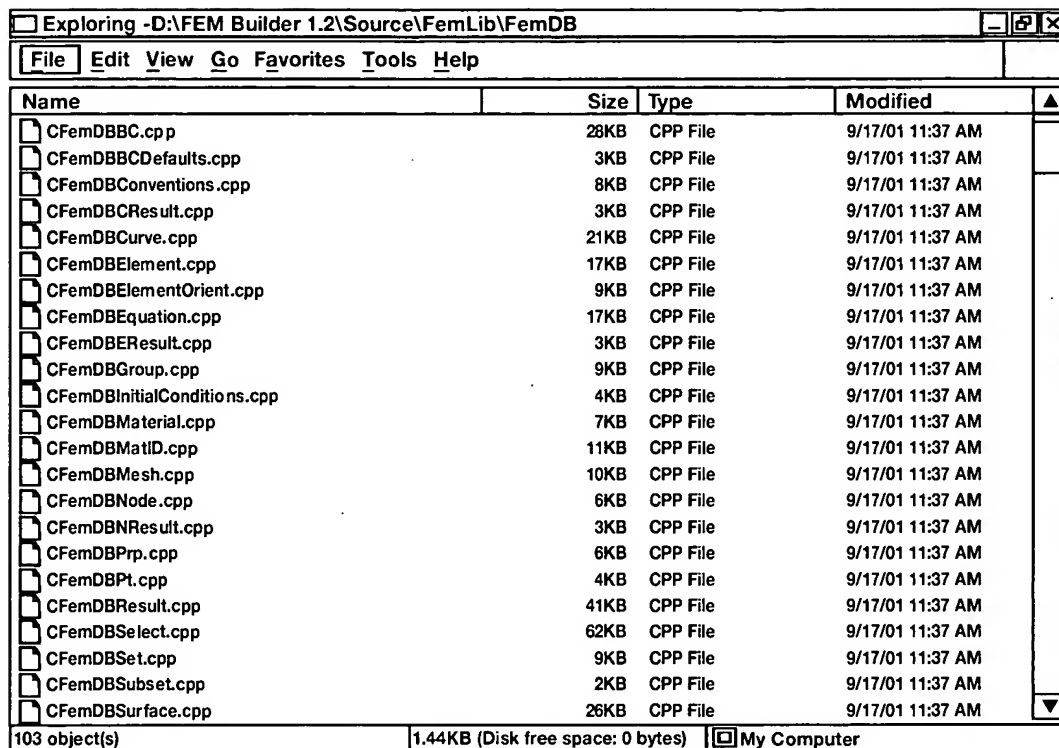
TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.1US

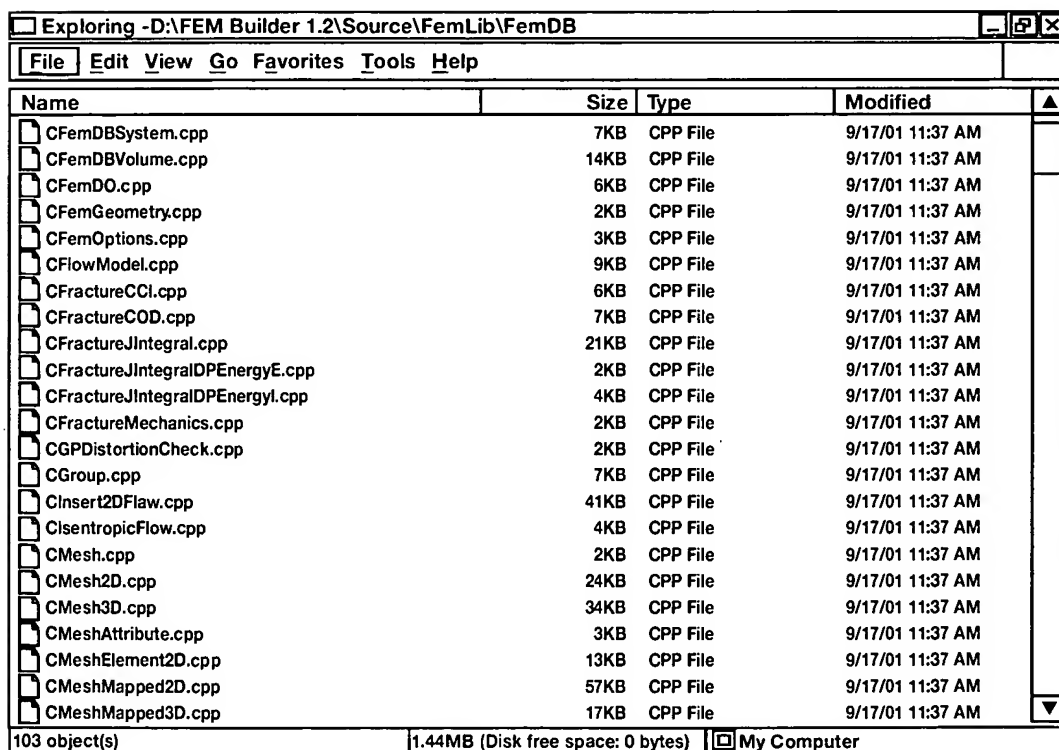
27/48



Name	Size	Type	Modified
CFemDBBC.cpp	28KB	CPP File	9/17/01 11:37 AM
CFemDBBCDefaults.cpp	3KB	CPP File	9/17/01 11:37 AM
CFemDBConventions.cpp	8KB	CPP File	9/17/01 11:37 AM
CFemDBCResult.cpp	3KB	CPP File	9/17/01 11:37 AM
CFemDBCure.cpp	21KB	CPP File	9/17/01 11:37 AM
CFemDBElement.cpp	17KB	CPP File	9/17/01 11:37 AM
CFemDBElementOrient.cpp	9KB	CPP File	9/17/01 11:37 AM
CFemDBEquation.cpp	17KB	CPP File	9/17/01 11:37 AM
CFemDBEResult.cpp	3KB	CPP File	9/17/01 11:37 AM
CFemDBGGroup.cpp	9KB	CPP File	9/17/01 11:37 AM
CFemDBInitialConditions.cpp	4KB	CPP File	9/17/01 11:37 AM
CFemDBMaterial.cpp	7KB	CPP File	9/17/01 11:37 AM
CFemDBMatID.cpp	11KB	CPP File	9/17/01 11:37 AM
CFemDBMesh.cpp	10KB	CPP File	9/17/01 11:37 AM
CFemDBNode.cpp	6KB	CPP File	9/17/01 11:37 AM
CFemDBNResult.cpp	3KB	CPP File	9/17/01 11:37 AM
CFemDBPrp.cpp	6KB	CPP File	9/17/01 11:37 AM
CFemDBPt.cpp	4KB	CPP File	9/17/01 11:37 AM
CFemDBResult.cpp	41KB	CPP File	9/17/01 11:37 AM
CFemDBSelect.cpp	62KB	CPP File	9/17/01 11:37 AM
CFemDBSet.cpp	9KB	CPP File	9/17/01 11:37 AM
CFemDBSubset.cpp	2KB	CPP File	9/17/01 11:37 AM
CFemDBSurface.cpp	26KB	CPP File	9/17/01 11:37 AM

103 object(s) 1.44KB (Disk free space: 0 bytes) My Computer

FIG. 49



Name	Size	Type	Modified
CFemDBSystem.cpp	7KB	CPP File	9/17/01 11:37 AM
CFemDBVolume.cpp	14KB	CPP File	9/17/01 11:37 AM
CFemDO.cpp	6KB	CPP File	9/17/01 11:37 AM
CFemGeometry.cpp	2KB	CPP File	9/17/01 11:37 AM
CFemOptions.cpp	3KB	CPP File	9/17/01 11:37 AM
CFlowModel.cpp	9KB	CPP File	9/17/01 11:37 AM
CFractureCCI.cpp	6KB	CPP File	9/17/01 11:37 AM
CFractureCOD.cpp	7KB	CPP File	9/17/01 11:37 AM
CFractureJIntegral.cpp	21KB	CPP File	9/17/01 11:37 AM
CFractureJIntegralDPEnergyE.cpp	2KB	CPP File	9/17/01 11:37 AM
CFractureJIntegralDPEnergyI.cpp	4KB	CPP File	9/17/01 11:37 AM
CFractureMechanics.cpp	2KB	CPP File	9/17/01 11:37 AM
CGPDistortionCheck.cpp	2KB	CPP File	9/17/01 11:37 AM
CGroup.cpp	7KB	CPP File	9/17/01 11:37 AM
CInsert2DFlaw.cpp	41KB	CPP File	9/17/01 11:37 AM
CIsentropicFlow.cpp	4KB	CPP File	9/17/01 11:37 AM
CMesh.cpp	2KB	CPP File	9/17/01 11:37 AM
CMesh2D.cpp	24KB	CPP File	9/17/01 11:37 AM
CMesh3D.cpp	34KB	CPP File	9/17/01 11:37 AM
CMeshAttribute.cpp	3KB	CPP File	9/17/01 11:37 AM
CMeshElement2D.cpp	13KB	CPP File	9/17/01 11:37 AM
CMeshMapped2D.cpp	57KB	CPP File	9/17/01 11:37 AM
CMeshMapped3D.cpp	17KB	CPP File	9/17/01 11:37 AM

103 object(s) 1.44MB (Disk free space: 0 bytes) My Computer

FIG. 50

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.1US

28/48

Exploring -D:\FEM Builder 1.2\Source\FemLib\FemDB			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
CMeshSmooth.cpp	8KB	CPP File	9/17/01 11:37 AM
CMeshTrans3D.cpp	17KB	CPP File	9/17/01 11:37 AM
CMoveCopy.cpp	55KB	CPP File	9/17/01 11:37 AM
CNode.cpp	4KB	CPP File	9/17/01 11:37 AM
COrient.cpp	2KB	CPP File	9/17/01 11:37 AM
CPlt.cpp	2KB	CPP File	9/17/01 11:37 AM
CQuadrant.cpp	19KB	CPP File	9/17/01 11:37 AM
CRefineMesh.cpp	87KB	CPP File	9/17/01 11:37 AM
CResult.cpp	43KB	CPP File	9/17/01 11:37 AM
CSindaAttrib.cpp	6KB	CPP File	9/17/01 11:37 AM
CSindaNetwork.cpp	37KB	CPP File	9/17/01 11:37 AM
CSubModel.cpp	15KB	CPP File	9/17/01 11:37 AM
CSweepModel.cpp	27KB	CPP File	9/17/01 11:37 AM
CThermalAblation.cpp	32KB	CPP File	9/17/01 11:37 AM
DrawFem.cpp	25KB	CPP File	9/17/01 11:37 AM
FemEntityType.cpp	9KB	CPP File	9/17/01 11:37 AM
GElementContour.cpp	29KB	CPP File	9/17/01 11:37 AM
GElementDistortion.cpp	9KB	CPP File	9/17/01 11:37 AM
GElementFun.cpp	16KB	CPP File	9/17/01 11:37 AM
GElementGInt.cpp	17KB	CPP File	9/17/01 11:37 AM
GElementInfo.cpp	42KB	CPP File	9/17/01 11:37 AM
GElementNCIP.cpp	27KB	CPP File	9/17/01 11:37 AM
GElementNCP.cpp	10KB	CPP File	9/17/01 11:37 AM

103 object(s) 1.44KB (Disk free space: 0 bytes) My Computer

FIG. 51

Exploring -D:\FEM Builder 1.2\Source\FemLib\FemDB			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
CSweepModel.cpp	27KB	CPP File	9/17/01 11:37 AM
CThermalAblation.cpp	32KB	CPP File	9/17/01 11:37 AM
DrawFem.cpp	25KB	CPP File	9/17/01 11:37 AM
FemEntityType.cpp	9KB	CPP File	9/17/01 11:37 AM
GElementContour.cpp	29KB	CPP File	9/17/01 11:37 AM
GElementDistortion.cpp	9KB	CPP File	9/17/01 11:37 AM
GElementFun.cpp	16KB	CPP File	9/17/01 11:37 AM
GElementGInt.cpp	17KB	CPP File	9/17/01 11:37 AM
GElementInfo.cpp	42KB	CPP File	9/17/01 11:37 AM
GElementNCIP.cpp	27KB	CPP File	9/17/01 11:37 AM
GElementNCP.cpp	10KB	CPP File	9/17/01 11:37 AM
GElementNCVI.cpp	13KB	CPP File	9/17/01 11:37 AM
GElementOrient.cpp	3KB	CPP File	9/17/01 11:37 AM
GElementSF.cpp	17KB	CPP File	9/17/01 11:37 AM
GElementSFD.cpp	33KB	CPP File	9/17/01 11:37 AM
GElementSFDD.cpp	51KB	CPP File	9/17/01 11:37 AM
GMeshFun.cpp	8KB	CPP File	9/17/01 11:37 AM
GPointFun.cpp	2KB	CPP File	9/17/01 11:37 AM
GRdAnsysRes.cpp	13KB	CPP File	9/17/01 11:37 AM
GSindaFun.cpp	2KB	CPP File	9/17/01 11:37 AM
ResultInterpolation.cpp	23KB	CPP File	9/17/01 11:37 AM
ResultSuperposition.cpp	10KB	CPP File	9/17/01 11:37 AM

103 object(s) 1.44MB (Disk free space: 0 bytes) My Computer

FIG. 52

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.1US

29/48

Exploring -D:\FEM Builder 1.2\Source\FemLib\Include				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
CAblationSurface.h	2KB	H File	9/17/01 11:37 AM	
CAdjacentElementList.h	2KB	H File	9/17/01 11:37 AM	
CAmplittdue.h	2KB	H File	9/17/01 11:37 AM	
CBC.h	3KB	H File	9/17/01 11:37 AM	
CBCDefault.h	9KB	H File	9/17/01 11:37 AM	
CBCR.h	2KB	H File	9/17/01 11:37 AM	
CBCSet.h	6KB	H File	9/17/01 11:37 AM	
CBCV.h	1KB	H File	9/17/01 11:37 AM	
CBoundaryNodeList.h	3KB	H File	9/17/01 11:37 AM	
CCAXAResult.h	3KB	H File	9/17/01 11:37 AM	
CCoincidentNode.h	3KB	H File	9/17/01 11:37 AM	
CContourPolygon.h	2KB	H File	9/17/01 11:37 AM	
CCrack.h	6KB	H File	9/17/01 11:37 AM	
CCrackList.h	2KB	H File	9/17/01 11:37 AM	
CCurveSubdivision.h	3KB	H File	9/17/01 11:37 AM	
CEAttrib.h	2KB	H File	9/17/01 11:37 AM	
CEdgeSubdivision.h	3KB	H File	9/17/01 11:37 AM	
CElement.h	15KB	H File	9/17/01 11:37 AM	
CEquation.h	3KB	H File	9/17/01 11:37 AM	
CFemCurve.h	2KB	H File	9/17/01 11:37 AM	
CFemDB.h	39KB	H File	9/17/01 11:37 AM	
CFemDBSet.h	2KB	H File	9/17/01 11:37 AM	
CFemDO.h	3KB	H File	9/17/01 11:37 AM	
113 object(s) 351 KB (Disk free space: 0 bytes) My Computer				

FIG. 53

Exploring -D:\FEM Builder 1.2\Source\FemLib\Include				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
CFemGeometry.h	3KB	H File	9/17/01 11:37 AM	
CFemOptions.h	3KB	H File	9/17/01 11:37 AM	
CFlowModel.h	4KB	H File	9/17/01 11:37 AM	
CFractureCCI.h	2KB	H File	9/17/01 11:37 AM	
CFractureCOD.h	2KB	H File	9/17/01 11:37 AM	
CFractureJIntegral.h	4KB	H File	9/17/01 11:37 AM	
CFractureJIntegralDPEnergyE.h	1KB	H File	9/17/01 11:37 AM	
CFractureJIntegralDPEnergy.h	3KB	H File	9/17/01 11:37 AM	
CFractureMechanics.h	1KB	H File	9/17/01 11:37 AM	
CGPDistortionCheck.h	1KB	H File	9/17/01 11:37 AM	
CGroup.h	4KB	H File	9/17/01 11:37 AM	
CInsert2DFlaw.h	5KB	H File	9/17/01 11:37 AM	
CIsentropicFlow.h	2KB	H File	9/17/01 11:37 AM	
CMesh.h	3KB	H File	9/17/01 11:37 AM	
CMesh2D.h	4KB	H File	9/17/01 11:37 AM	
CMesh3D.h	5KB	H File	9/17/01 11:37 AM	
CMeshAttribute.h	3KB	H File	9/17/01 11:37 AM	
CMeshElement2D.h	4KB	H File	9/17/01 11:37 AM	
CMeshMapped2D.h	7KB	H File	9/17/01 11:37 AM	
CMeshMapped3D.h	4KB	H File	9/17/01 11:37 AM	
CMeshSmooth.h	3KB	H File	9/17/01 11:37 AM	
CMeshSubdivision.h	4KB	H File	9/17/01 11:37 AM	
CMeshTrans3D.h	5KB	H File	9/17/01 11:37 AM	
113 object(s) 351 KB (Disk free space: 0 bytes) My Computer				

FIG. 54

30/48

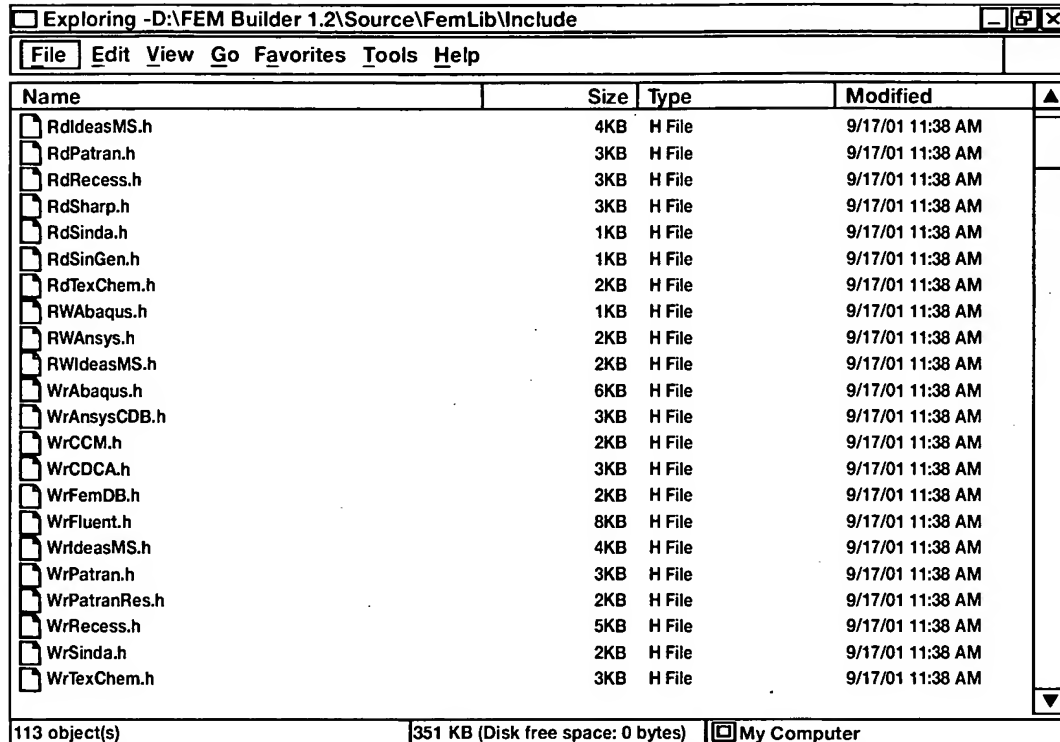
Exploring -D:\FEM Builder 1.2\Source\FemLib\Include			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
CMoveCopy.h	5KB	H File	9/17/01 11:37 AM
CNode.h	2KB	H File	9/17/01 11:37 AM
COrient.h	2KB	H File	9/17/01 11:37 AM
CQuadrant.h	5KB	H File	9/17/01 11:37 AM
CRdCrackCombustionData.h	2KB	H File	9/17/01 11:37 AM
CRefineMesh.h	7KB	H File	9/17/01 11:37 AM
CResult.h	11KB	H File	9/17/01 11:37 AM
CSindaAttrib.h	2KB	H File	9/17/01 11:37 AM
CSindaNetwork.h	7KB	H File	9/17/01 11:37 AM
CSubModel.h	2KB	H File	9/17/01 11:37 AM
CSweepModel.h	3KB	H File	9/17/01 11:37 AM
CThermalAblation.h	3KB	H File	9/17/01 11:37 AM
CWrCrackCombustionData.h	2KB	H File	9/17/01 11:37 AM
CWrSindaData.h	3KB	H File	9/17/01 11:37 AM
FemEntityType.h	6KB	H File	9/17/01 11:37 AM
FemStdFn.h	2KB	H File	9/17/01 11:37 AM
GElementContour.h	3KB	H File	9/17/01 11:37 AM
GElementDistortion.h	2KB	H File	9/17/01 11:37 AM
GElementFun.h	3KB	H File	9/17/01 11:37 AM
GElementGInt.h	4KB	H File	9/17/01 11:37 AM
GElementInfo.h	3KB	H File	9/17/01 11:37 AM
GElementNCIPh	3KB	H File	9/17/01 11:37 AM
GElementNCPPh	2KB	H File	9/17/01 11:38 AM
113 object(s) 351 KB (Disk free space: 0 bytes) My Computer			

FIG. 55

Exploring -D:\FEM Builder 1.2\Source\FemLib\Include			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
CElementNCVI.h	2KB	H File	9/17/01 11:38 AM
GElementOrient.h	1KB	H File	9/17/01 11:38 AM
GElementSF.h	2KB	H File	9/17/01 11:38 AM
GElementSFD.h	3KB	H File	9/17/01 11:38 AM
GElementSFDD.h	4KB	H File	9/17/01 11:38 AM
GMeshFun.h	1KB	H File	9/17/01 11:38 AM
GPointFun.h	1KB	H File	9/17/01 11:38 AM
GRdAnsysRes.h	3KB	H File	9/17/01 11:38 AM
GSindaFun.h	1KB	H File	9/17/01 11:38 AM
RdAbaqus.h	6KB	H File	9/17/01 11:38 AM
RdAbaqusFIF.h	1KB	H File	9/17/01 11:38 AM
RdAbaqusFOF.h	2KB	H File	9/17/01 11:38 AM
RdAbaqusInput.h	3KB	H File	9/17/01 11:38 AM
RdAnsysCDB.h	6KB	H File	9/17/01 11:38 AM
RdAnsysRes.h	4KB	H File	9/17/01 11:38 AM
RdAschar.h	5KB	H File	9/17/01 11:38 AM
RdCCM.h	2KB	H File	9/17/01 11:38 AM
RdCDCA.h	2KB	H File	9/17/01 11:38 AM
RdFemDB.h	2KB	H File	9/17/01 11:38 AM
RdFluent.h	5KB	H File	9/17/01 11:38 AM
RdFluentJ10.h	3KB	H File	9/17/01 11:38 AM
RdGridGen.h	2KB	H File	9/17/01 11:38 AM
113 object(s) 351 KB (Disk free space: 0 bytes) My Computer			

FIG. 56

31/48

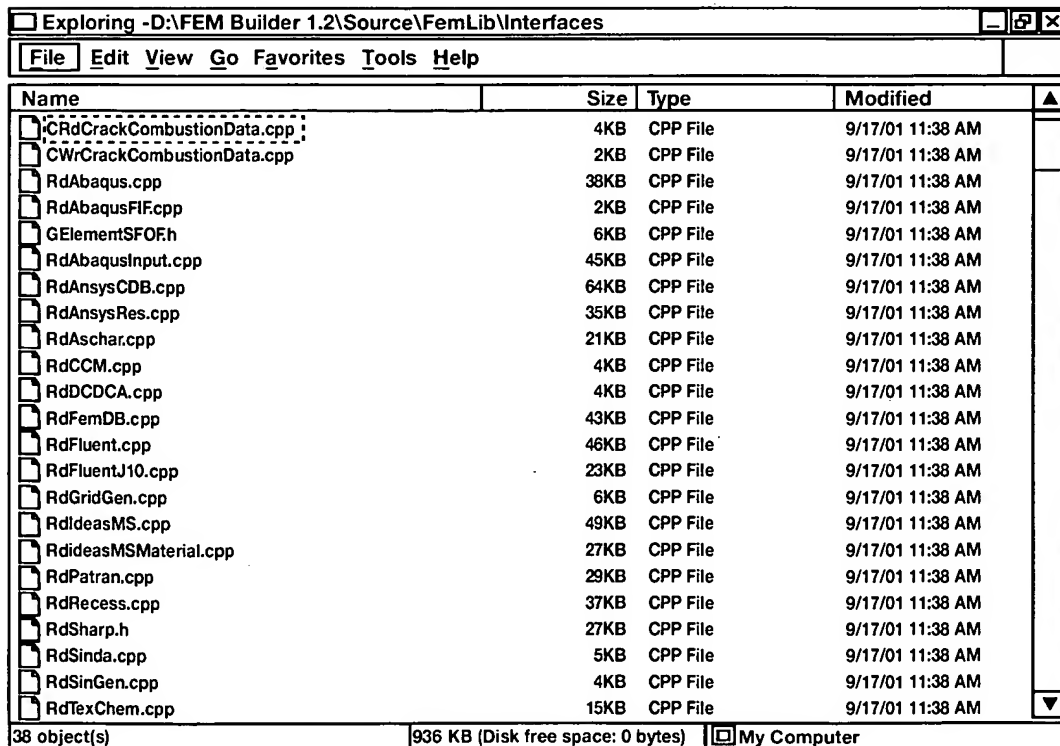


Exploring -D:\FEM Builder 1.2\Source\FemLib\Include

Name	Size	Type	Modified
RdIdeasMS.h	4KB	H File	9/17/01 11:38 AM
RdPatran.h	3KB	H File	9/17/01 11:38 AM
RdRecess.h	3KB	H File	9/17/01 11:38 AM
RdSharp.h	3KB	H File	9/17/01 11:38 AM
RdSinda.h	1KB	H File	9/17/01 11:38 AM
RdSinGen.h	1KB	H File	9/17/01 11:38 AM
RdTexChem.h	2KB	H File	9/17/01 11:38 AM
RWAbaqus.h	1KB	H File	9/17/01 11:38 AM
RWAnsys.h	2KB	H File	9/17/01 11:38 AM
RWIdeasMS.h	2KB	H File	9/17/01 11:38 AM
WrAbaqus.h	6KB	H File	9/17/01 11:38 AM
WrAnsysCDB.h	3KB	H File	9/17/01 11:38 AM
WrCCM.h	2KB	H File	9/17/01 11:38 AM
WrCDCA.h	3KB	H File	9/17/01 11:38 AM
WrFemDB.h	2KB	H File	9/17/01 11:38 AM
WrFluent.h	8KB	H File	9/17/01 11:38 AM
WrIdeasMS.h	4KB	H File	9/17/01 11:38 AM
WrPatran.h	3KB	H File	9/17/01 11:38 AM
WrPatranRes.h	2KB	H File	9/17/01 11:38 AM
WrRecess.h	5KB	H File	9/17/01 11:38 AM
WrSinda.h	2KB	H File	9/17/01 11:38 AM
WrTexChem.h	3KB	H File	9/17/01 11:38 AM

113 object(s) 351 KB (Disk free space: 0 bytes) My Computer

FIG. 57



Exploring -D:\FEM Builder 1.2\Source\FemLib\Interfaces

Name	Size	Type	Modified
CRdCrackCombustionData.cpp	4KB	CPP File	9/17/01 11:38 AM
CWrCrackCombustionData.cpp	2KB	CPP File	9/17/01 11:38 AM
RdAbaqus.cpp	38KB	CPP File	9/17/01 11:38 AM
RdAbaqusFIF.cpp	2KB	CPP File	9/17/01 11:38 AM
GElementSFOf.h	6KB	CPP File	9/17/01 11:38 AM
RdAbaqusInput.cpp	45KB	CPP File	9/17/01 11:38 AM
RdAnsysCDB.cpp	64KB	CPP File	9/17/01 11:38 AM
RdAnsysRes.cpp	35KB	CPP File	9/17/01 11:38 AM
RdAschar.cpp	21KB	CPP File	9/17/01 11:38 AM
RdCCM.cpp	4KB	CPP File	9/17/01 11:38 AM
RdDCDCA.cpp	4KB	CPP File	9/17/01 11:38 AM
RdFemDB.cpp	43KB	CPP File	9/17/01 11:38 AM
RdFluent.cpp	46KB	CPP File	9/17/01 11:38 AM
RdFluentJ10.cpp	23KB	CPP File	9/17/01 11:38 AM
RdGridGen.cpp	6KB	CPP File	9/17/01 11:38 AM
RdIdeasMS.cpp	49KB	CPP File	9/17/01 11:38 AM
RdIdeasMSMaterial.cpp	27KB	CPP File	9/17/01 11:38 AM
RdPatran.cpp	29KB	CPP File	9/17/01 11:38 AM
RdRecess.cpp	37KB	CPP File	9/17/01 11:38 AM
RdSharp.h	27KB	CPP File	9/17/01 11:38 AM
RdSinda.cpp	5KB	CPP File	9/17/01 11:38 AM
RdSinGen.cpp	4KB	CPP File	9/17/01 11:38 AM
RdTexChem.cpp	15KB	CPP File	9/17/01 11:38 AM

38 object(s) 936 KB (Disk free space: 0 bytes) My Computer

FIG. 58

32/48

Exploring -D:\FEM Builder 1.2\Source\FemLib\Interfaces

Name	Size	Type	Modified
RdIdeasMSMaterial.cpp	27KB	CPP File	9/17/01 11:38 AM
RdPatran.h	29KB	CPP File	9/17/01 11:38 AM
RdRecess.cpp	37KB	CPP File	9/17/01 11:38 AM
RdSharp.cpp	27KB	CPP File	9/17/01 11:38 AM
RdSinda.cpp	5KB	CPP File	9/17/01 11:38 AM
RdSinGen.cpp	4KB	CPP File	9/17/01 11:38 AM
RdTexChem.cpp	15KB	CPP File	9/17/01 11:38 AM
RWAbaqus.cpp	10KB	CPP File	9/17/01 11:38 AM
RWAnsys.cpp	20KB	CPP File	9/17/01 11:38 AM
RWIdeasMS.cpp	19KB	CPP File	9/17/01 11:38 AM
WrAbaqus.cpp	36KB	CPP File	9/17/01 11:38 AM
WrAnsysCDB.h	34KB	CPP File	9/17/01 11:38 AM
WrCCM.cpp	6KB	CPP File	9/17/01 11:38 AM
WrCDCA.cpp	12KB	CPP File	9/17/01 11:38 AM
WrFemDB.cpp	37KB	CPP File	9/17/01 11:38 AM
WrFluent.cpp	65KB	CPP File	9/17/01 11:38 AM
WrIdeasMS.cp	44KB	CPP File	9/17/01 11:38 AM
WrIdeasMSMaterial.cpp	27KB	CPP File	9/17/01 11:38 AM
WrPatran.cpp	33KB	CPP File	9/17/01 11:38 AM
WrRecess.cpp	35KB	CPP File	9/17/01 11:38 AM
WrSinda.cpp	19KB	CPP File	9/17/01 11:38 AM
WrTexChem.cpp	22KB	CPP File	9/17/01 11:38 AM

38 object(s) 936 KB (Disk free space: 0 bytes) My Computer

FIG. 59

Exploring -D:\FEM Builder 1.2\Source\Fem\FemPython

Name	Size	Type	Modified
FEDoc.cpp	1KB	CPP File	9/17/01 11:38 AM
FEDoc.h	1KB	H File	9/17/01 11:38 AM
FEM.cpp	6KB	CPP File	9/17/01 11:38 AM
FEM_ExtractFileNames.hpp	4KB	CPP File	9/17/01 11:38 AM
FEM_FEDoc.hpp	6KB	HPP File	9/17/01 11:38 AM
FEM_FEModel.hpp	31KB	HPP File	9/17/01 11:38 AM
FEM_FEModelBC.hpp	32KB	HPP File	9/17/01 11:38 AM
FEM_FEModelColor.hpp	2KB	HPP File	9/17/01 11:38 AM
FEM_FEModelCurve.hpp	17KB	HPP File	9/17/01 11:38 AM
FEM_FEModelDelete.hpp	3KB	HPP File	9/17/01 11:38 AM
FEM_FEModelElement.hpp	13KB	HPP File	9/17/01 11:38 AM
FEM_FEModelEquation.hpp	6KB	HPP File	9/17/01 11:38 AM
FEM_FEModelGroup.hpp	3KB	HPP File	9/17/01 11:38 AM
FEM_FEModelInterface.hpp	32KB	HPP File	9/17/01 11:38 AM
FEM_FEModelList.hpp	5KB	HPP File	9/17/01 11:38 AM
FEM_FEModelMaterial.hpp	3KB	HPP File	9/17/01 11:38 AM
FEM_FEModelMesh.hpp	15KB	HPP File	9/17/01 11:38 AM
FEM_FEModelMoveCopy.hpp	11KB	HPP File	9/17/01 11:38 AM
FEM_FEModelNode.hpp	7KB	HPP File	9/17/01 11:38 AM
FEM_FEModelPoint.hpp	5KB	HPP File	9/17/01 11:38 AM
FEM_FEModelPostprocessing.hpp	15KB	HPP File	9/17/01 11:38 AM
FEM_FEModelRegion.hpp	2KB	HPP File	9/17/01 11:38 AM
FEM_FEModelResult.hpp	11KB	HPP File	9/17/01 11:38 AM

65 object(s) 556 KB (Disk free space: 0 bytes) My Computer

FIG. 60

33/48

Exploring -D:\FEM Builder 1.2\Source\FemPython

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
FEM_FEModelSubModel.hpp	3KB	HPP File	9/17/01 11:38 AM
FEM_FEModelSurface.hpp	11KB	HPP File	9/17/01 11:38 AM
FEM_FEModelSweep.hpp	2KB	HPP File	9/17/01 11:38 AM
FEM_FEModelSystem.hpp	3KB	HPP File	9/17/01 11:38 AM
FEM_FEModelTools.hpp	3KB	HPP File	9/17/01 11:38 AM
FEM_FEModelVolume.hpp	9KB	HPP File	9/17/01 11:38 AM
FEM_FEProperty.hpp	9KB	HPP File	9/17/01 11:38 AM
FEM_FEPropertyGroup.hpp	7KB	HPP File	9/17/01 11:38 AM
FEM_FEResult.hpp	15KB	HPP File	9/17/01 11:38 AM
FEModel.cpp	5KB	CPP File	9/17/01 11:38 AM
FEModel.h	19KB	H File	9/17/01 11:38 AM
FEModelBC.cpp	39KB	CPP File	9/17/01 11:38 AM
FEModelColor.cpp	2KB	CPP File	9/17/01 11:38 AM
FEModelCurve.cpp	14KB	CPP File	9/17/01 11:38 AM
FEModelDelete.cpp	3KB	CPP File	9/17/01 11:38 AM
FEModelElement.cpp	14KB	CPP File	9/17/01 11:38 AM
FEModelEquation.cpp	3KB	CPP File	9/17/01 11:38 AM
FEModelGroup.cpp	5KB	CPP File	9/17/01 11:38 AM
FEModelInterface.cpp	49KB	CPP File	9/17/01 11:38 AM
FEModelList.cpp	5KB	CPP File	9/17/01 11:38 AM
FEModelMaterial.cpp	1KB	CPP File	9/17/01 11:38 AM
FEModelMesh.cpp	22KB	CPP File	9/17/01 11:38 AM
FEModelMoveCopy.cpp	13KB	CPP File	9/17/01 11:38 AM

65 object(s) 556KB (Disk free space: 0 bytes) My Computer

FIG. 61

Exploring -D:\FEM Builder 1.2\Source\FemPython

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
FEModelMaterial.cpp	1KB	CPP File	9/17/01 11:38 AM
FEModelMesh.cpp	22KB	CPP File	9/17/01 11:38 AM
FEModelMoveCopy.cpp	13KB	CPP File	9/17/01 11:38 AM
FEModelNode.cpp	7KB	CPP File	9/17/01 11:38 AM
FEModelPoint.cpp	5KB	CPP File	9/17/01 11:38 AM
FEModelPostprocessing.cpp	14KB	CPP File	9/17/01 11:38 AM
FEModelRegion.cpp	2KB	CPP File	9/17/01 11:38 AM
FEModelResult.cpp	9KB	CPP File	9/17/01 11:38 AM
FEModelSubModel.cpp	3KB	CPP File	9/17/01 11:38 AM
FEModelSurface.cpp	11KB	CPP File	9/17/01 11:38 AM
FEModelSweep.cpp	2KB	CPP File	9/17/01 11:38 AM
FEModelSystem.cpp	4KB	CPP File	9/17/01 11:38 AM
FEModelVolume.cpp	8KB	CPP File	9/17/01 11:38 AM
FemPython.dsp	10KB	DSP File	9/17/01 11:38 AM
FemPython.dsw	3KB	DSW File	9/17/01 11:38 AM
FEProperty.cpp	4KB	CPP File	9/17/01 11:38 AM
FEProperty.h	2KB	H File	9/17/01 11:38 AM
FEPropertyGroup.cpp	3KB	CPP File	9/17/01 11:38 AM
FEPropertyGroup.h	1KB	H File	9/17/01 11:38 AM
FEResult.cpp	10KB	CPP File	9/17/01 11:38 AM
FEResult.h	2KB	H File	9/17/01 11:38 AM
FESddfn.h	1KB	H File	9/17/01 11:38 AM

65 object(s) 556KB (Disk free space: 0 bytes) My Computer

FIG. 62

34/48

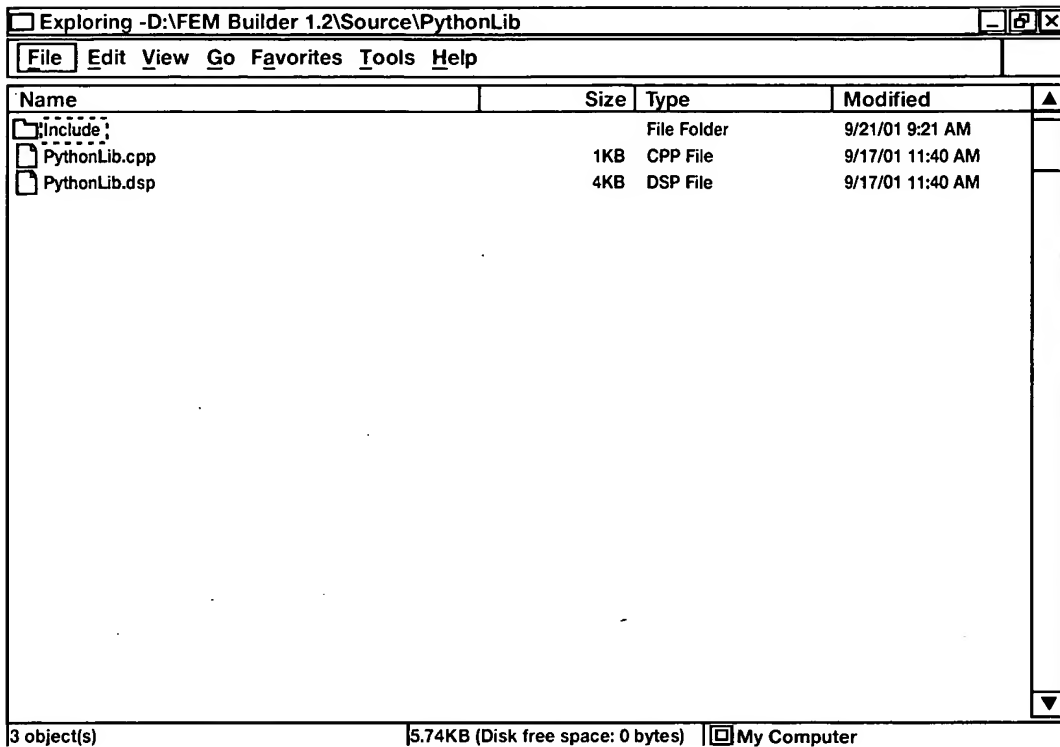


FIG. 63

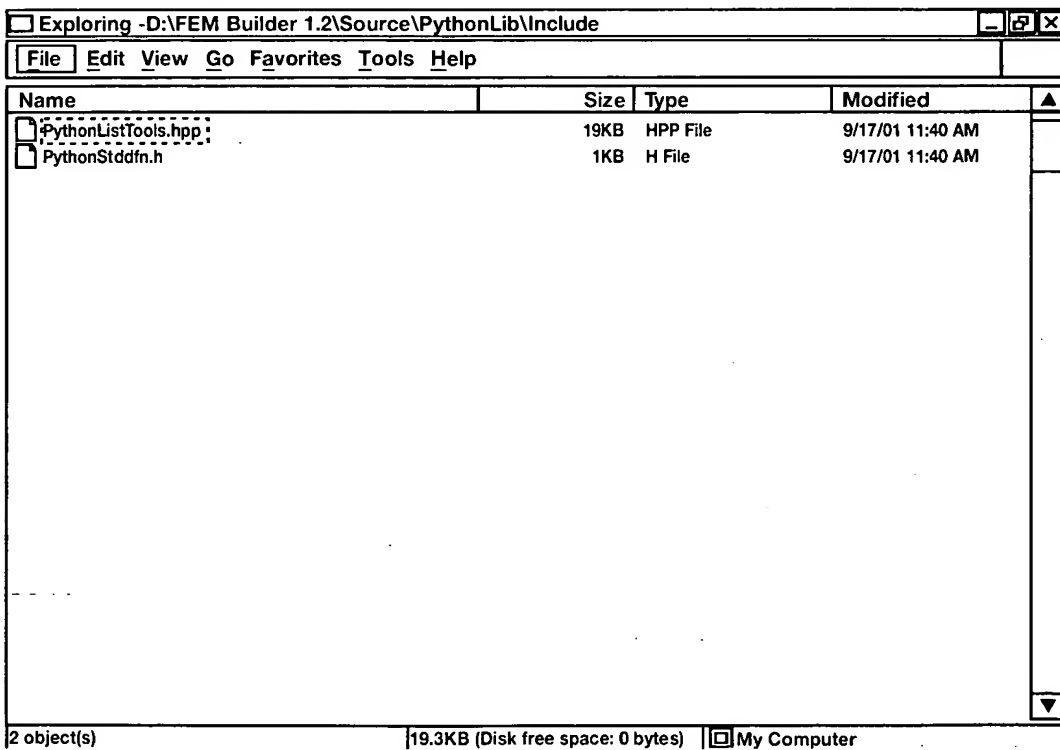


FIG. 64

35/48

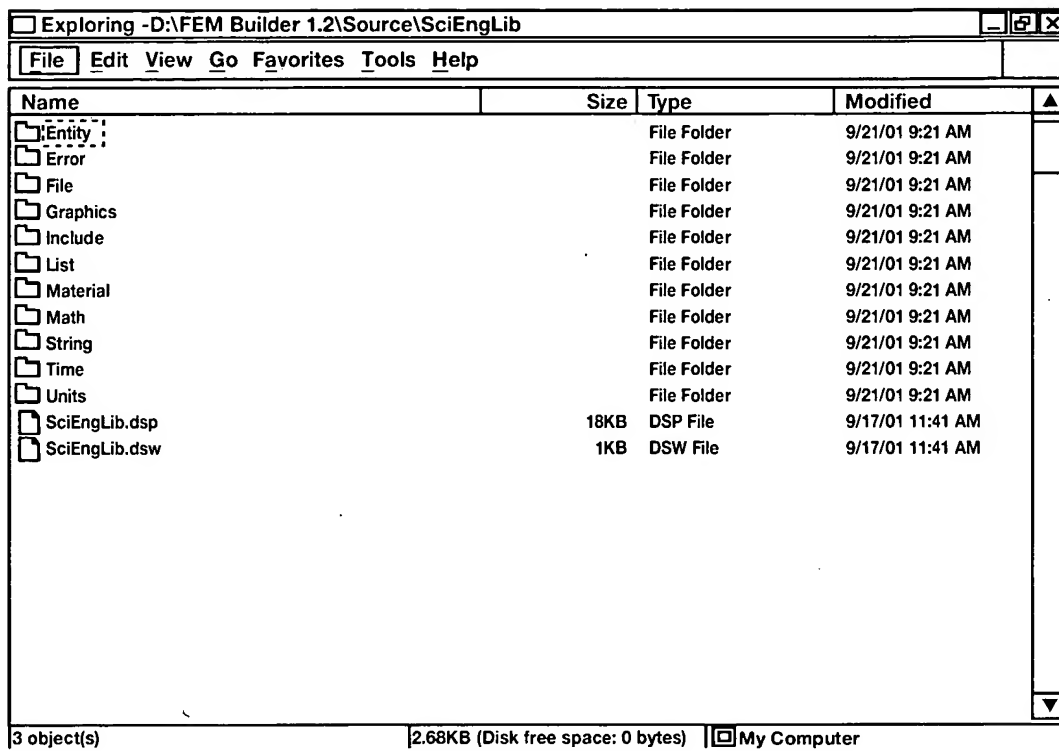


FIG. 65

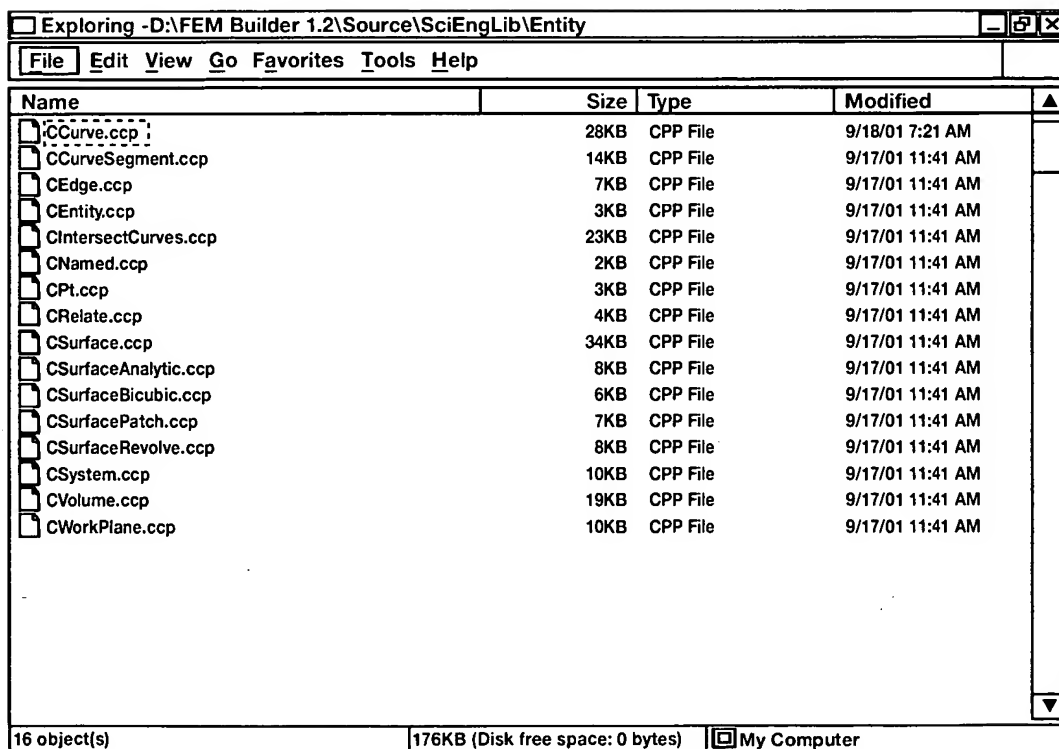


FIG. 66

36/48

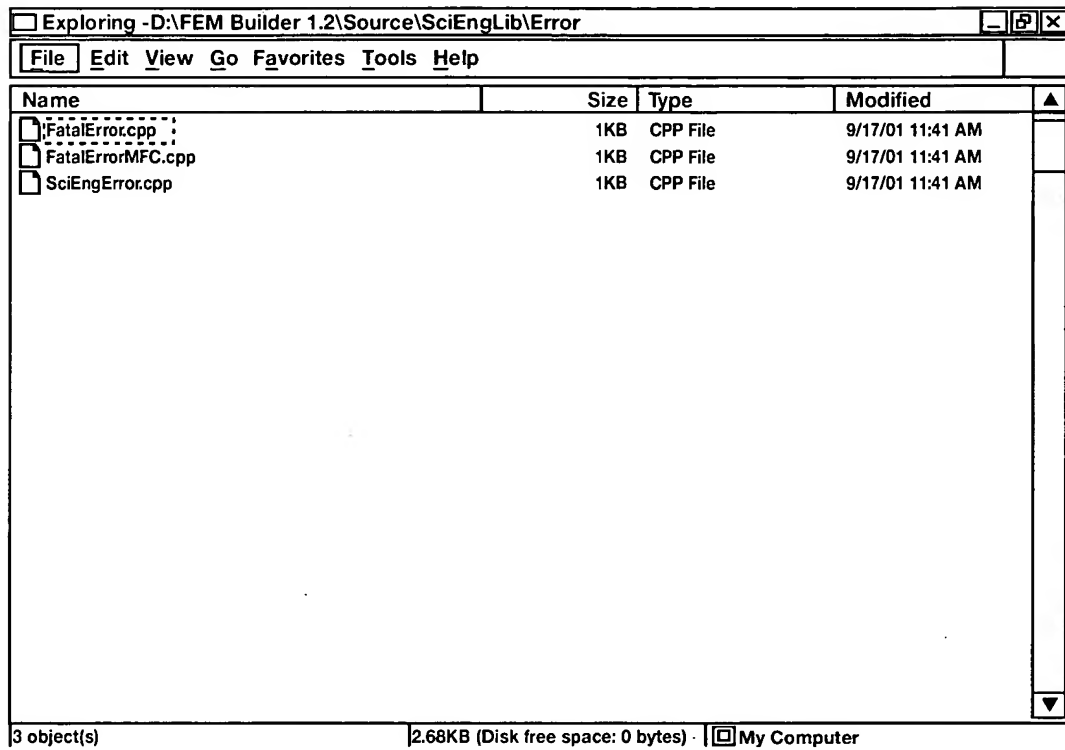


FIG. 67

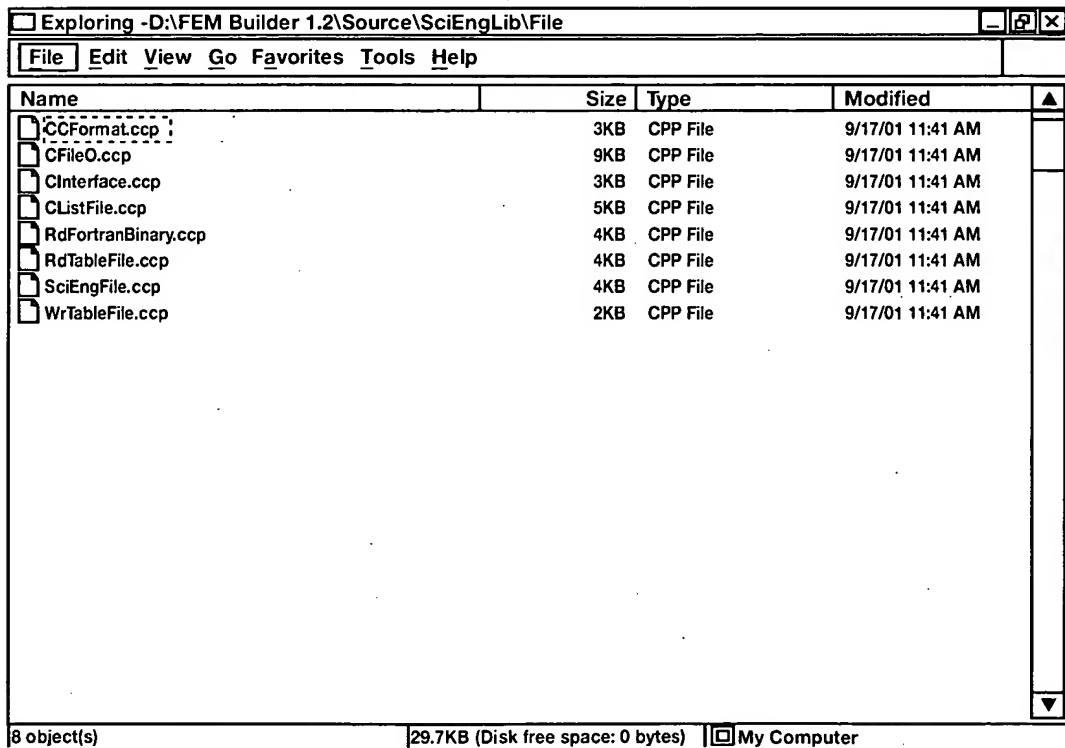


FIG. 68

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.1US

37/48

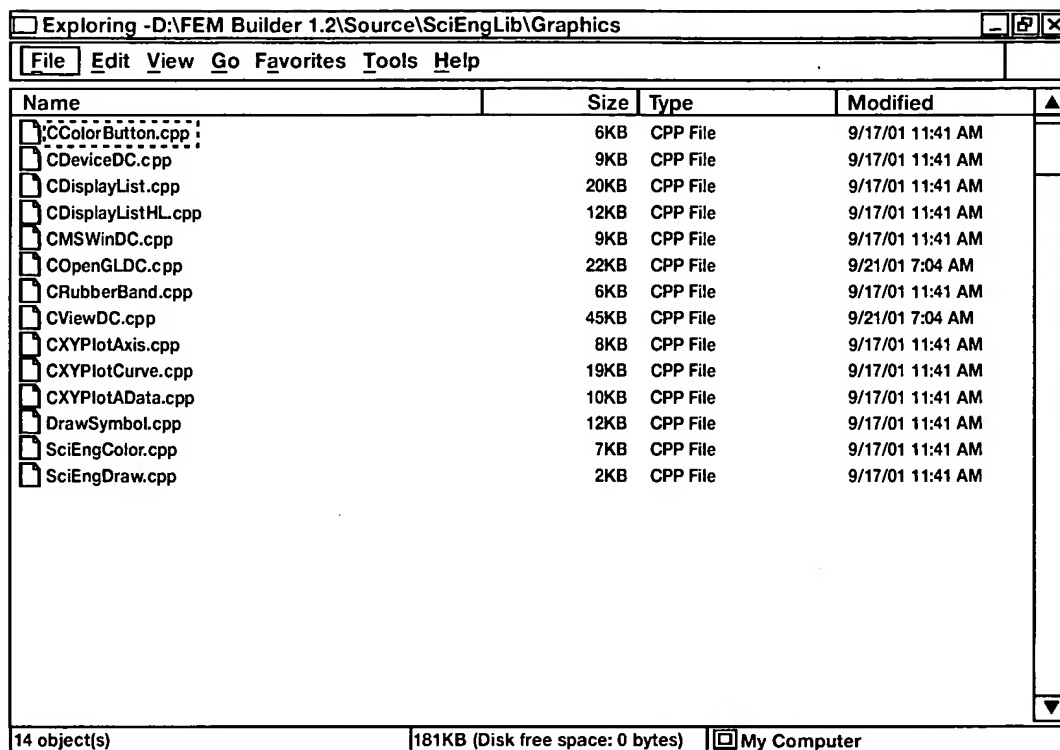


FIG. 69

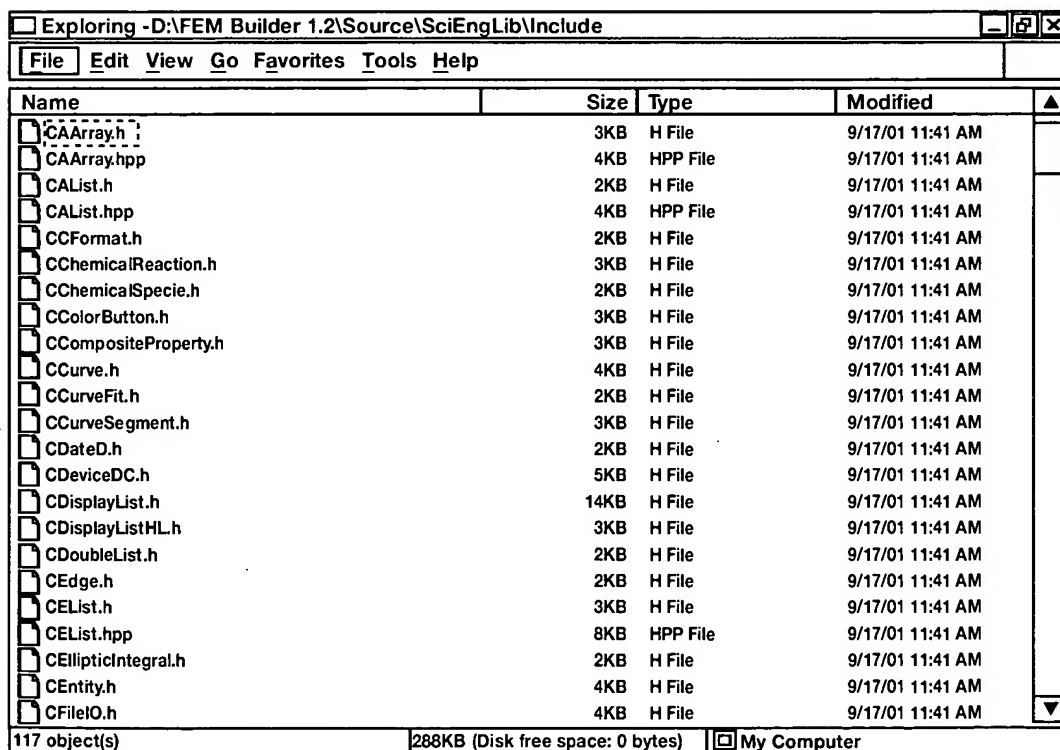


FIG. 70

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.
Serial No.: 10/005,752
Docket No.: 2507-5744.1US

38/48

Exploring -D:\FEM Builder 1.2\Source\SciEngLib\Include				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
CFindRoot.h	2KB	H File	9/17/01 11:41 AM	
CHash.h	3KB	H File	9/17/01 11:41 AM	
CIntergrate.h	3KB	H File	9/17/01 11:41 AM	
CIntegrateODE.h	5KB	H File	9/17/01 11:41 AM	
CInterface.h	2KB	H File	9/17/01 11:41 AM	
CIntersectCurves.h	2KB	H File	9/17/01 11:41 AM	
CIntList.h	2KB	H File	9/17/01 11:41 AM	
CLeastSquareFit.h	1KB	H File	9/17/01 11:41 AM	
CLEList.h	2KB	H File	9/17/01 11:41 AM	
CLEList.hpp	6KB	HPP File	9/17/01 11:41 AM	
CLinkedList.h	2KB	H File	9/17/01 11:41 AM	
CLinkedList.hpp	6KB	HPP File	9/17/01 11:41 AM	
CListFile.h	2KB	H File	9/17/01 11:41 AM	
CMaterialDB.h	2KB	H File	9/17/01 11:41 AM	
CMatID.h	3KB	H File	9/17/01 11:41 AM	
CMSWinDC.h	3KB	H File	9/17/01 11:41 AM	
CNamed.h	2KB	H File	9/17/01 11:41 AM	
CNEList.h	2KB	H File	9/17/01 11:41 AM	
CNEList.hpp	4KB	HPP File	9/17/01 11:41 AM	
CNewtonRaphson.h	2KB	H File	9/17/01 11:41 AM	
CNTable.hpp	3KB	HPP File	9/17/01 11:41 AM	
COpenGLDC.h	5KB	H File	9/21/01 7:04 AM	
COptimize1D.h	3KB	H File	9/17/01 11:41 AM	
117 object(s) 288KB (Disk free space: 0 bytes) My Computer				

FIG. 71

Exploring -D:\FEM Builder 1.2\Source\SciEngLib\Include				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
COptimizeND.h	3KB	H File	9/17/01 11:41 AM	
CPrpAnnotation.h	2KB	H File	9/17/01 11:41 AM	
CPrpAttr.h	2KB	H File	9/17/01 11:41 AM	
CPrpDB.h	3KB	H File	9/17/01 11:41 AM	
CPrpGroup.h	2KB	H File	9/17/01 11:41 AM	
CPrpNote.h	1KB	H File	9/17/01 11:41 AM	
CPrpTable.h	2KB	H File	9/17/01 11:41 AM	
CPl.h	2KB	H File	9/17/01 11:41 AM	
CRelate.h	2KB	H File	9/17/01 11:41 AM	
CRelate.hpp	1KB	HPP File	9/17/01 11:41 AM	
CRubberBand.h	2KB	H File	9/17/01 11:41 AM	
CSet.h	2KB	H File	9/17/01 11:41 AM	
CSet.hpp	6KB	HPP File	9/17/01 11:41 AM	
CSetArray.h	6KB	H File	9/17/01 11:41 AM	
CSpline.h	2KB	H File	9/17/01 11:41 AM	
CSurface.hpp	11KB	HPP File	9/17/01 11:41 AM	
CSurfaceEdge.h	2KB	H File	9/17/01 11:41 AM	
CSurfaceFit.h	3KB	H File	9/17/01 11:41 AM	
CSurfacePatch.h	3KB	H File	9/17/01 11:41 AM	
CSystem.h	3KB	H File	9/17/01 11:41 AM	
CTable.h	4KB	H File	9/17/01 11:41 AM	
CTableCell.h	3KB	H File	9/17/01 11:41 AM	
CText.h	3KB	H File	9/17/01 11:41 AM	
117 object(s) 288KB (Disk free space: 0 bytes) My Computer				

FIG. 72

39/48

Exploring -D:\FEM Builder 1.2\Source\SciEngLib\Include				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
CTextFont.h	2KB	H File	9/17/01 11:41 AM	
CTextFontDialog.h	1KB	H File	9/17/01 11:41 AM	
CTimeDate.h	2KB	H File	9/17/01 11:41 AM	
CTimeMS.h	2KB	H File	9/17/01 11:41 AM	
CUnitSystem.h	4KB	H File	9/17/01 11:41 AM	
CViewDC.h	10KB	H File	9/21/01 7:04 AM	
CViewDCDef.h	2KB	H File	9/17/01 11:41 AM	
CVolume.h	4KB	H File	9/17/01 11:41 AM	
CWorkPlane.h	4KB	H File	9/17/01 11:41 AM	
CXYPlotAxis.h	3KB	H File	9/17/01 11:41 AM	
CXYPlotCurve.h	5KB	H File	9/17/01 11:41 AM	
CXYPlotData.h	3KB	H File	9/21/01 7:04 AM	
DrawSymbol.h	2KB	H File	9/17/01 11:41 AM	
MatProperty.h	2KB	H File	9/17/01 11:41 AM	
MatPropertyInfo.h	2KB	H File	9/17/01 11:41 AM	
RdFortranBinary.h	3KB	H File	9/17/01 11:41 AM	
RdMaterialDB.h	2KB	H File	9/17/01 11:41 AM	
RdPrpDB.h	2KB	H File	9/17/01 11:41 AM	
RdTableFile.h	2KB	H File	9/17/01 11:41 AM	
SciEngBit.h	1KB	H File	9/17/01 11:41 AM	
SciEngBit.hpp	1KB	HPP File	9/17/01 11:41 AM	
SciEngColor.h	3KB	H File	9/17/01 11:41 AM	
SciEngCSystem.h	2KB	H File	9/17/01 11:41 AM	
117 object(s) 288KB (Disk free space: 0 bytes) <input type="checkbox"/> My Computer				

FIG. 73

Exploring -D:\FEM Builder 1.2\Source\SciEngLib\Include				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
SciEngCurve.h	3KB	H File	9/17/01 11:41 AM	
SciEngCurveFit.h	7KB	H File	9/17/01 11:41 AM	
SciEngDraw.h	1KB	H File	9/17/01 11:41 AM	
SciEngError.h	1KB	H File	9/17/01 11:41 AM	
SciEngFile.h	2KB	H File	9/17/01 11:41 AM	
SciEngLib.h	3KB	H File	9/17/01 11:41 AM	
SciEngMath.h	4KB	H File	9/17/01 11:41 AM	
SciEngMath.hpp	4KB	HPP File	9/17/01 11:41 AM	
SciEngMatrix.h	3KB	H File	9/17/01 11:41 AM	
SciEngMove.h	1KB	H File	9/17/01 11:41 AM	
SciEngMove.hpp	1KB	HPP File	9/17/01 11:41 AM	
SciEngPoint.h	4KB	H File	9/17/01 11:41 AM	
SciEngPolygon.h	1KB	H File	9/17/01 11:41 AM	
SciEngResult.h	2KB	H File	9/17/01 11:41 AM	
SciEngSort.h	1KB	H File	9/17/01 11:41 AM	
SciEngSort.hpp	5KB	HPP File	9/17/01 11:41 AM	
SciEngStddefn.h	3KB	H File	9/17/01 11:41 AM	
SciEngStr.h	3KB	H File	9/17/01 11:41 AM	
SciEngSurface.h	1KB	H File	9/17/01 11:41 AM	
SciEngVector.h	2KB	H File	9/17/01 11:41 AM	
SciEngVector.hpp	1KB	HPP File	9/17/01 11:41 AM	
StdAfx.h	1KB	H File	9/17/01 11:41 AM	
WrMaterialDB.h	1KB	H File	9/17/01 11:41 AM	
117 object(s) 288KB (Disk free space: 0 bytes) <input type="checkbox"/> My Computer				

FIG. 74

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.1US

40/48

Exploring -D:\FEM Builder 1.2\Source\SciEngLib\Include			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
SciEngError.h	1KB	H File	9/17/01 11:41 AM
SciEngFile.h	2KB	H File	9/17/01 11:41 AM
SciEngLib.h	3KB	H File	9/17/01 11:41 AM
SciEngMath.h	4KB	H File	9/17/01 11:41 AM
SciEngMath.hpp	4KB	HPP File	9/17/01 11:41 AM
SciEngMatrix.h	3KB	H File	9/17/01 11:41 AM
SciEngMove.h	1KB	H File	9/17/01 11:41 AM
SciEngMove.hpp	1KB	HPP File	9/17/01 11:41 AM
SciEngPoint.h	4KB	H File	9/17/01 11:41 AM
SciEngPolygon.h	1KB	H File	9/17/01 11:41 AM
SciEngResult.h	2KB	H File	9/17/01 11:41 AM
SciEngSort.h	1KB	H File	9/17/01 11:41 AM
SciEngSort.hpp	5KB	HPP File	9/17/01 11:41 AM
SciEngStddef.h	3KB	H File	9/17/01 11:41 AM
SciEngStr.h	3KB	H File	9/17/01 11:41 AM
SciEngSurface.h	1KB	H File	9/17/01 11:41 AM
SciEngVector.h	2KB	H File	9/17/01 11:41 AM
SciEngVector.hpp	1KB	HPP File	9/17/01 11:41 AM
StdAfx.h	1KB	H File	9/17/01 11:41 AM
WrMaterialDB.h	1KB	H File	9/17/01 11:41 AM
WrPrpDB.h	2KB	H File	9/17/01 11:41 AM
WrTableFile.h	1KB	H File	9/17/01 11:41 AM

117 object(s) 288KB (Disk free space: 0 bytes) My Computer

FIG. 75

Exploring -D:\FEM Builder 1.2\Source\SciEngLib\List			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
CDoubleList.cpp	3KB	CPP File	9/17/01 11:41 AM
CHash.cpp	17KB	CPP File	9/17/01 11:41 AM
CIntList.cpp	4KB	CPP File	9/17/01 11:41 AM

3 object(s) 21.4KB (Disk free space: 0 bytes) My Computer

FIG. 76

41/48

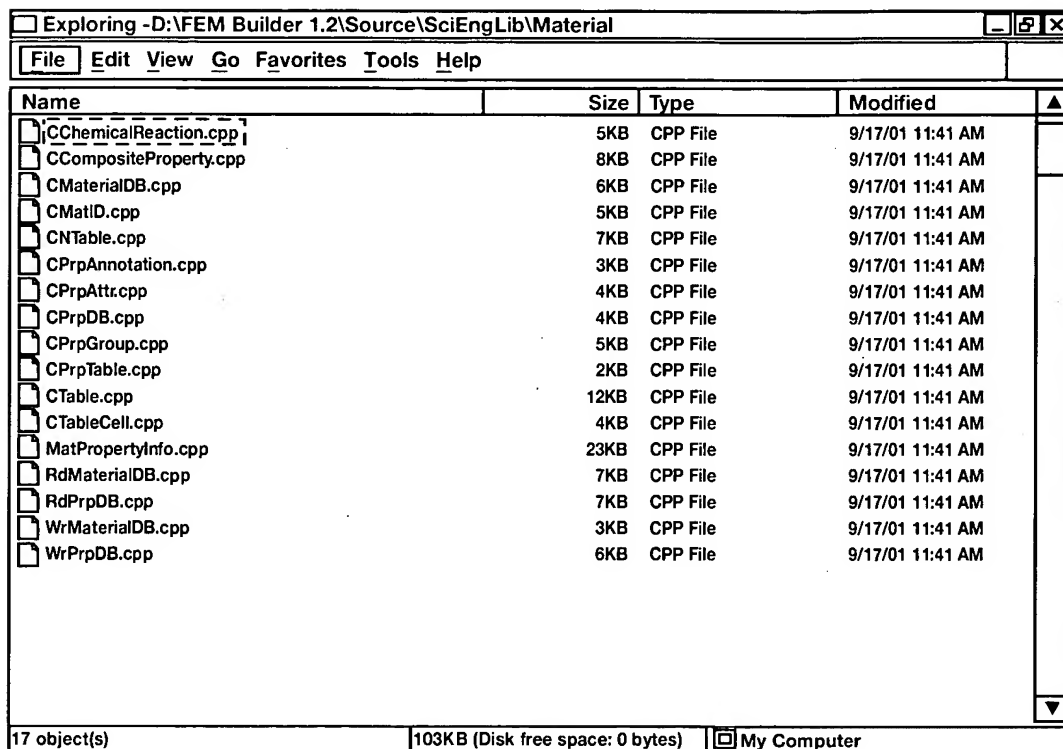


FIG. 77

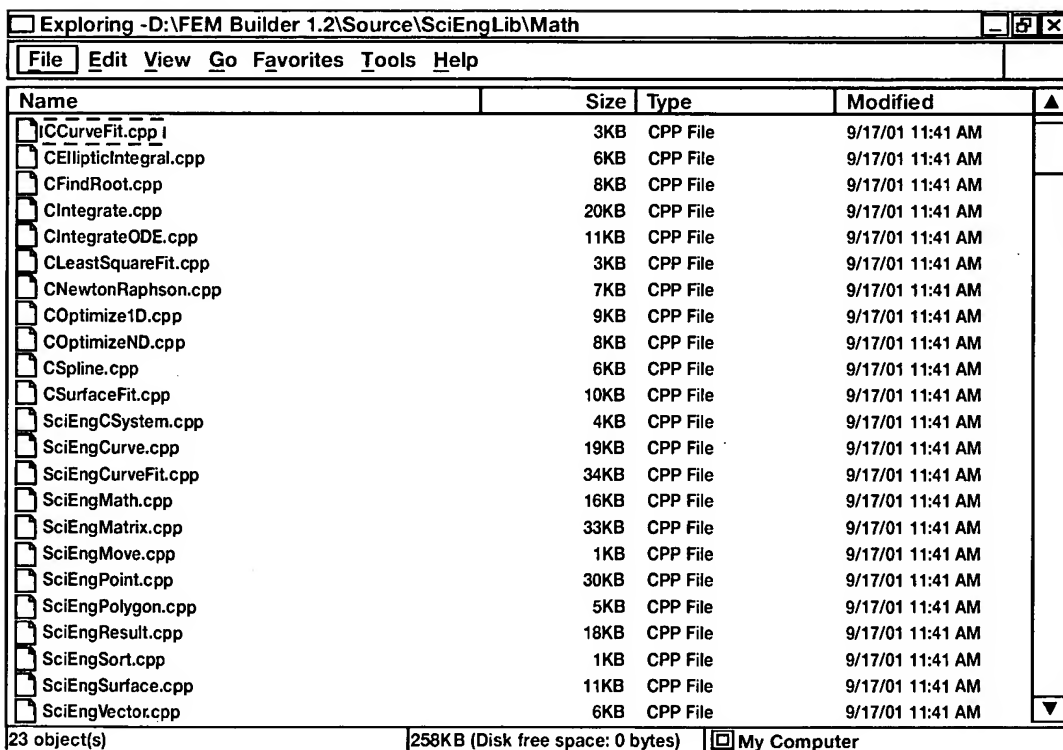


FIG. 78

42/48

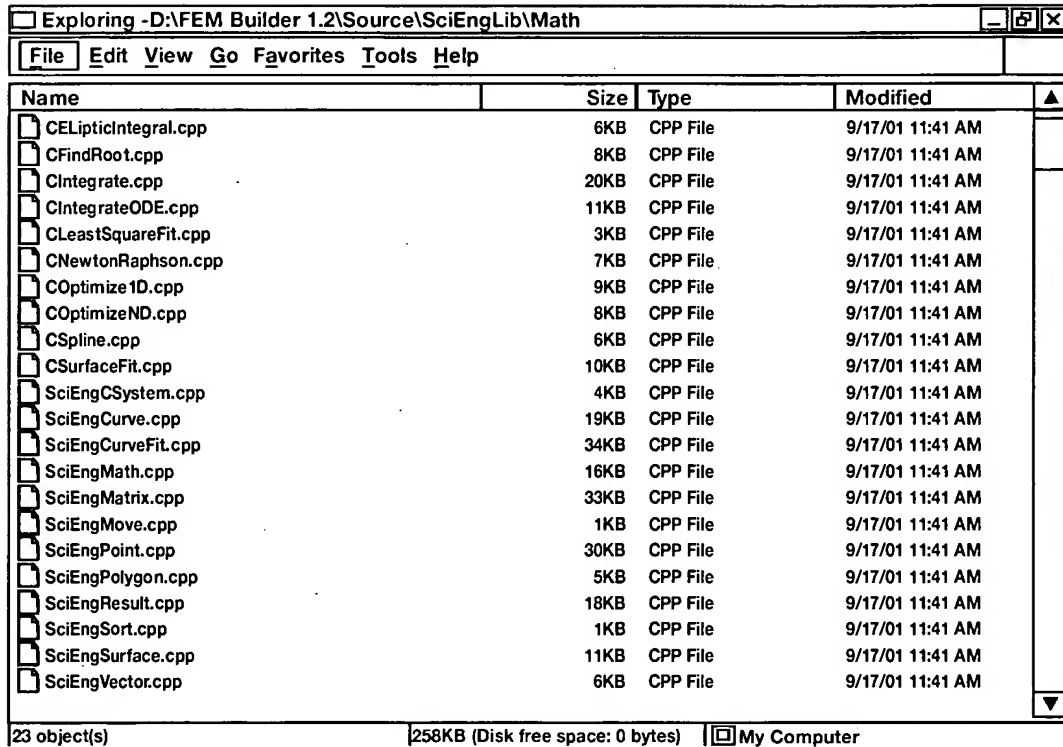


FIG. 79

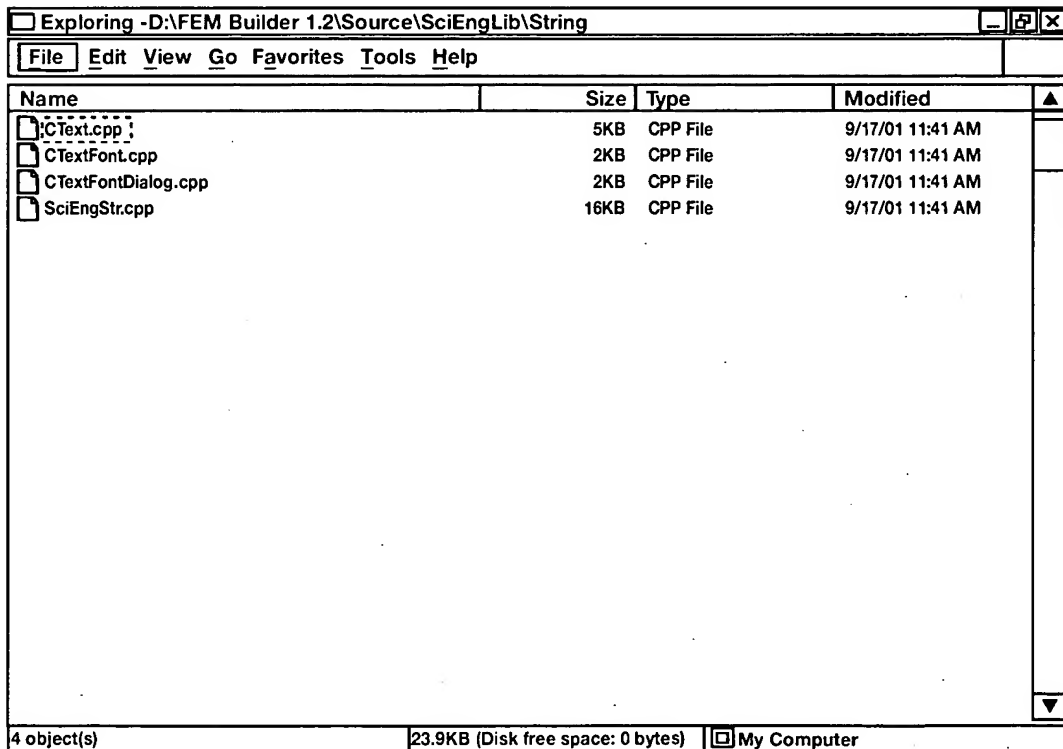


FIG. 80

43/48

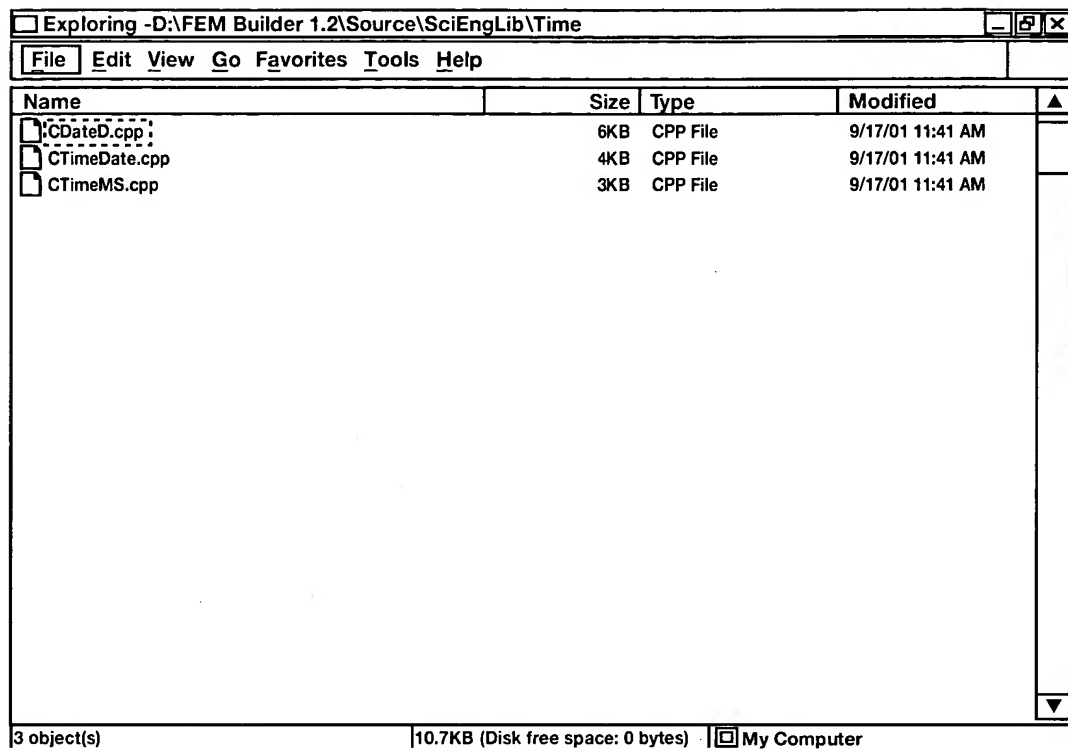


FIG. 81

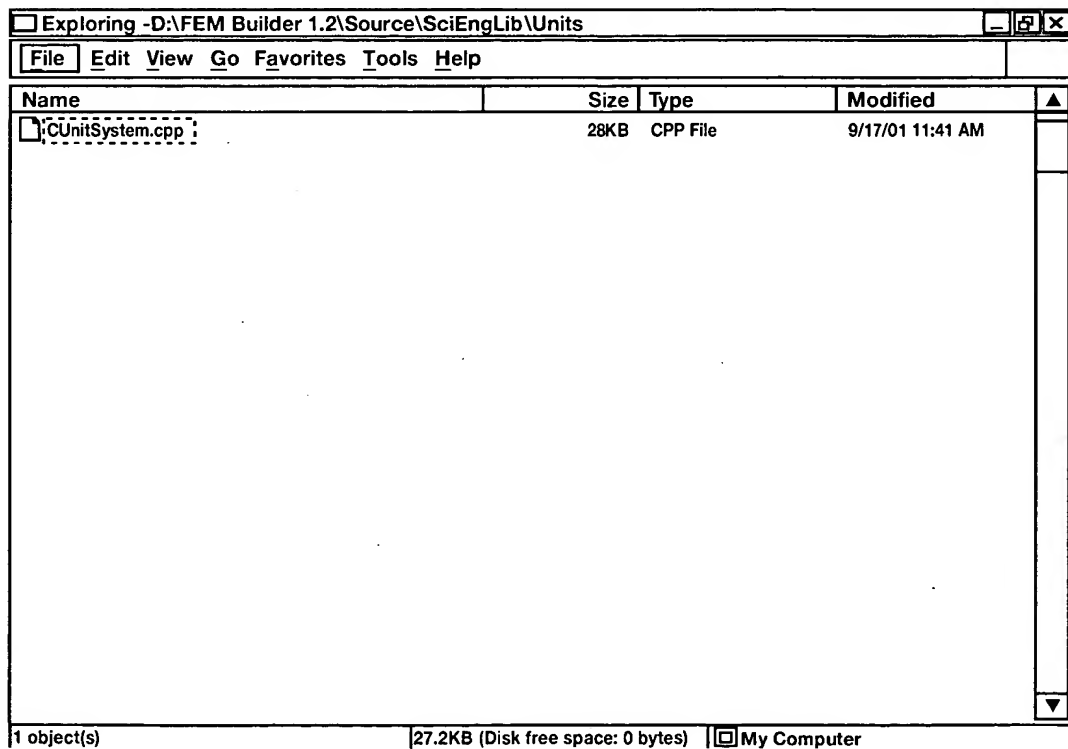


FIG. 82

44/48

Exploring -D:\FEM Builder 1.2\Test			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
Python		File Folder	9/21/01 9:21 AM
Results		File Folder	9/21/01 9:21 AM
Ablation-Structure.unv	1,858KB	UNV File	9/17/01 11:34 AM
Ablation-Thermal-Aft.plt	415KB	PLT File	9/17/01 11:34 AM
Ablation-Thermal-Fwd.plt	1,640KB	PLT File	9/17/01 11:34 AM
Axisym1.fdb	8KB	FDB File	9/17/01 11:34 AM
Axisym1.fil	40KB	FIL File	9/17/01 11:34 AM
Axisym1.resinp	4KB	RESINP File	9/17/01 11:34 AM
Axisym1.unv	11KB	UNV File	9/17/01 11:34 AM
Axisym1BC.fdb	7KB	FDB File	9/17/01 11:34 AM
Axisym1Caxa.fil	216KB	FIL File	9/17/01 11:34 AM
Axisym1Caxa.inp	4KB	INP File	9/17/01 11:34 AM
Axisym1CAXAResults.fdb	52KB	FDB File	9/17/01 11:34 AM
Axisym1CentResults.fdb	31KB	FDB File	9/17/01 11:34 AM
Axisym1Results.fdb	30KB	FDB File	9/17/01 11:34 AM
BoundaryListCheck1.fdb	4KB	FDB File	9/17/01 11:34 AM
CheckConnectivity.fdb	30KB	FDB File	9/17/01 11:34 AM
ChemicalReaction.fdb	1KB	FDB File	9/17/01 11:34 AM
ConcidentNodes.fdb	2KB	FDB File	9/17/01 11:34 AM
Constrain2d.fdb	13KB	FDB File	9/17/01 11:34 AM
Constrain3d.fdb	34KB	FDB File	9/17/01 11:34 AM
cp1d_bb.resinp	41KB	RESINP File	9/17/01 11:34 AM
cp1d_bb.resout	83KB	RESOUT File	9/17/01 11:34 AM

187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer

FIG. 83

Exploring -D:\FEM Builder 1.2\Test			
File Edit View Go Favorites Tools Help			
Name	Size	Type	Modified
cp1d_bls.resinp	7KB	RESINP File	9/17/01 11:35 AM
cp1d_bls.resout	245KB	RESOUT File	9/17/01 11:35 AM
cp1d_blt.resinp	8KB	RESINP File	9/17/01 11:35 AM
cp1d_blt.resout	246KB	RESOUT File	9/17/01 11:35 AM
cp1d_cbs.resinp	60KB	RESINP File	9/17/01 11:35 AM
cp1d_cbs.resout	98KB	RESOUT File	9/17/01 11:35 AM
cp1d_cbt.resinp	61KB	RESINP File	9/17/01 11:35 AM
cp1d_cbt.resout	96KB	RESOUT File	9/17/01 11:35 AM
Crack1FQ.fdb	38KB	FDB File	9/17/01 11:35 AM
Crack1FQ.fil	140KB	FIL File	9/17/01 11:35 AM
Crack1FQResults.fdb	175KB	FDB File	9/17/01 11:35 AM
Crack2DFFSL.fdb	16KB	FDB File	9/17/01 11:35 AM
Crack2DFFSL.fil	108KB	FIL File	9/17/01 11:35 AM
Crack2DFFSL.inp	6KB	INP File	9/17/01 11:35 AM
Crack2DFFSQ.fdb	32KB	FDB File	9/17/01 11:35 AM
Crack2DFFSQ.fil	199KB	FIL File	9/17/01 11:35 AM
Crack2DFFSQ.inp	13KB	INP File	9/17/01 11:35 AM
Crack2DFZL.fdb	113KB	FDB File	9/17/01 11:35 AM
Crack2DFZL.fil	1,707KB	FIL File	9/17/01 11:35 AM
Crack2DFZL.inp	44KB	INP File	9/17/01 11:35 AM
Crack2DFZQ.fdb	243KB	FDB File	9/17/01 11:35 AM
Crack2DFZQ.fil	3,487KB	FIL File	9/17/01 11:35 AM
Crack2DFZQ.inp	102KB	INP File	9/17/01 11:35 AM

187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer

FIG. 84

45/48

Exploring -D:\FEM Builder 1.2\Test				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
Crack2DPS.fdb	32KB	FDB File	9/17/01 11:35 AM	
Crack2DSFML.fdb	18KB	FDB File	9/17/01 11:35 AM	
Crack2DSFML.fil	104KB	FIL File	9/17/01 11:35 AM	
Crack2DSFML.inp	7KB	INP File	9/17/01 11:35 AM	
Crack2DSFMQ.fdb	37KB	FDB File	9/17/01 11:35 AM	
Crack2DSFMQ.fil	213KB	FIL File	9/17/01 11:35 AM	
Crack2DSFMQ.inp	15KB	INP File	9/17/01 11:35 AM	
Crack2DSZL.fdb	75KB	PDB File	9/17/01 11:35 AM	
Crack2DSZL.fil	1,065KB	FIL File	9/17/01 11:35 AM	
Crack2DSZL.inp	29KB	INP File	9/17/01 11:35 AM	
Crack2DSZQ.fdb	153KB	FDB File	9/17/01 11:35 AM	
Crack2DSZQ.fil	2,175KB	FIL File	9/17/01 11:35 AM	
Crack2DSZQ.inp	63KB	INP File	9/17/01 11:35 AM	
Crack3DFFSL.fdb	47KB	FDB File	9/17/01 11:35 AM	
Crack3DFFSL.fil	449KB	FIL File	9/17/01 11:35 AM	
Crack3DFFSL.inp	20KB	INP File	9/17/01 11:35 AM	
Crack3DFFSQ.fdb	128KB	FDB File	9/17/01 11:35 AM	
Crack3DFFSQ.fil	1,154KB	FIL File	9/17/01 11:35 AM	
Crack3DFFSQ.inp	62KB	INP File	9/17/01 11:35 AM	
Crack3DPS.fdb	114KB	FDB File	9/17/01 11:35 AM	
Crack3DSFML.fdb	58KB	FDB File	9/17/01 11:35 AM	
Crack3DSFML.fil	519KB	FIL File	9/17/01 11:35 AM	
Crack3DSFML.inp	25KB	INP File	9/17/01 11:35 AM	
187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer				

FIG. 85

Exploring -D:\FEM Builder 1.2\Test				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
Crack3DSFMQ.fdb	157KB	FDB File	9/17/01 11:35 AM	
Crack3DSFMQ.fil	1,333KB	FIL File	9/17/01 11:35 AM	
Crack3DSFMQ.inp	77KB	INP File	9/17/01 11:35 AM	
CrackSBRAMSubScaleAxial.fdb	296KB	FDB File	9/17/01 11:35 AM	
CrackSBRAMSubScaleAxial.fil	2,097KB	FIL File	9/17/01 11:35 AM	
CrackSBRAMSubScaleAxial.inp	127KB	INP File	9/17/01 11:35 AM	
CrackSBRAMSubScaleRadial.fdb	320KB	FDB File	9/17/01 11:35 AM	
CrackSBRAMSubScaleRadial.fil	2,319KB	FIL File	9/17/01 11:35 AM	
CrackSBRAMSubScaleRadial.inp	130KB	INP File	9/17/01 11:35 AM	
CrackSBRAMSubScaleRadial3D.fdb	1,230KB	FDB File	9/17/01 11:35 AM	
CrackSBRAMSubScaleRadial3D.fil	13,507KB	FIL File	9/17/01 11:35 AM	
CrackSBRAMSubScaleRadial3D.inp	673KB	INP File	9/17/01 11:35 AM	
CurveFit1.dat	1KB	Movie Clip	9/17/01 11:35 AM	
CurveFit2.dat	1KB	Movie Clip	9/17/01 11:35 AM	
CurveFit3.dat	1KB	Movie Clip	9/17/01 11:35 AM	
CurveFit4.dat	1KB	Movie Clip	9/17/01 11:35 AM	
CurveFit5.dat	1KB	Movie Clip	9/17/01 11:35 AM	
EdgeNotched2D.fdb	275KB	FDB File	9/17/01 11:35 AM	
EdgeNotched3D.fdb	594KB	FDB File	9/17/01 11:35 AM	
EditColor.fdb	9KB	FDB File	9/17/01 11:35 AM	
ElementDistortion2D.fdb	3KB	FDB File	9/17/01 11:35 AM	
ElementDistortion3D.fdb	5KB	FDB File	9/17/01 11:35 AM	
Example4.fdb	47KB	FDB File	9/17/01 11:35 AM	
187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer				

FIG. 86

46/48

Exploring -D:\FEM Builder 1.2\Test

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
InterfaceFemDB_1.fdb	13KB	FDB File	9/17/01 11:35 AM
InterfaceFemDB_2.fdb	15KB	FDB File	9/17/01 11:35 AM
InterfaceIdeas_1.unv	31KB	UNV File	9/17/01 11:35 AM
LessFluid.fdb	1,507KB	FDB File	9/17/01 11:35 AM
LessFluid-CustomSolve.jou	1KB	JOU File	9/17/01 11:35 AM
LessSolid.fdb	620KB	FDB File	9/17/01 11:35 AM
LineElement.fdb	2KB	FDB File	9/17/01 11:35 AM
MatProp1.pdb	2KB	PDB File	9/17/01 11:35 AM
MatProp2.pdb	1KB	PDB File	9/17/01 11:35 AM
MeshSurface.fdb	20KB	FDB File	9/17/01 11:35 AM
MeshVolume.fdb	24KB	FDB File	9/17/01 11:35 AM
MixingElbow.cas	129KB	CAS File	9/17/01 11:35 AM
MixingElbow.dat	212KB	Movie Clip	9/17/01 11:35 AM
MixingElbow.fdb	657KB	FDB File	9/17/01 11:35 AM
Nozzle1.jou	1KB	JOU File	9/17/01 11:35 AM
Nozzle1_ascii.cas	263KB	CAS File	9/17/01 11:35 AM
Nozzle1_ascii.dat	980KB	Movie Clip	9/17/01 11:35 AM
NozzleModel.cas	172KB	CAS File	9/17/01 11:35 AM
NozzleModel.dat	365KB	Movie Clip	9/17/01 11:35 AM
P&NRegions.fdb	4KB	FDB File	9/17/01 11:35 AM
PipeFlow.cas	28KB	CAS File	9/17/01 11:35 AM
PipeFlow.dat	11KB	Movie Clip	9/17/01 11:35 AM
PipeFlow.fdb	7KB	FDB File	9/17/01 11:35 AM

187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer

FIG. 87

Exploring -D:\FEM Builder 1.2\Test

File Edit View Go Favorites Tools Help

Name	Size	Type	Modified
PlaneE1.fdb	8KB	FDB File	9/17/01 11:35 AM
PlaneE1.fil	30KB	FIL File	9/17/01 11:35 AM
PlaneE1.inp	3KB	INP File	9/17/01 11:35 AM
PlaneE1.unv	12KB	UNV File	9/17/01 11:35 AM
PlaneE1G.fdb	9KB	FDB File	9/17/01 11:35 AM
PlaneE2.fdb	43KB	FDB File	9/17/01 11:35 AM
PlaneE2.fil	223KB	FIL File	9/17/01 11:35 AM
PlaneE2.resinp	16KB	RESINP File	9/17/01 11:35 AM
PlaneE2F.fdb	152KB	FDB File	9/17/01 11:35 AM
PlaneE2Funv	159KB	UNV File	9/17/01 11:35 AM
PlaneS1.fdb	10KB	FDB File	9/17/01 11:35 AM
PlaneS2.fdb	65KB	FDB File	9/17/01 11:35 AM
PlaneS2.fil	386KB	FIL File	9/17/01 11:35 AM
RdAschar.plt	79KB	PLT File	9/17/01 11:35 AM
RdCCM_1.ccmout	2KB	CCMOUT File	9/17/01 11:35 AM
RdCDCA_1.cdcout	67KB	CDCCOUT File	9/17/01 11:35 AM
RWAnsys1.cdb	20KB	CDB File	9/17/01 11:35 AM
RWAnsys2.cdb	7KB	CDB File	9/17/01 11:35 AM
RWideas1.unv	185KB	UNV File	9/17/01 11:35 AM
SBRAMSubScale.fdb	242KB	FDB File	9/17/01 11:35 AM
SelectByRegion.fdb	4KB	FDB File	9/17/01 11:35 AM
SelectCurve.fdb	14KB	FDB File	9/17/01 11:35 AM
SelectGroup.fdb	15KB	FDB File	9/17/01 11:35 AM

187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer

FIG. 88

47/48

Exploring -D:\FEM Builder 1.2\Test				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
Example4.fil	246KB	FIL File	9/17/01 11:35 AM	
Example4.inp	16KB	INP File	9/17/01 11:35 AM	
Example4Ffdb	33KB	FDB File	9/17/01 11:35 AM	
ExpCurve.dat	2KB	Movie Clip	9/17/01 11:35 AM	
fdv.nam	1KB	NAM File	9/17/01 11:35 AM	
fdv.xyz	5KB	XYZ File	9/17/01 11:35 AM	
fdv0001.dat	14KB	Movie Clip	9/17/01 11:35 AM	
fdv3d.nam	1KB	NAM File	9/17/01 11:35 AM	
fdv3d.xyz	28KB	XYZ File	9/17/01 11:35 AM	
fdv3d0001.dat	91KB	Movie Clip	9/17/01 11:35 AM	
FluidCFD1.fdb	8KB	FDB File	9/17/01 11:35 AM	
FluidCFD1.inp	3KB	INP File	9/17/01 11:35 AM	
Geometry.fdb	22KB	FDB File	9/17/01 11:35 AM	
GeometryEdit_1.fdb	3KB	FDB File	9/17/01 11:35 AM	
GridGen.grd	6KB	GRD File	9/17/01 11:35 AM	
GridGen.p3d	23KB	P3D File	9/17/01 11:35 AM	
Heat0.fdb	8KB	FDB File	9/17/01 11:35 AM	
Heat0.sot	11KB	SOT File	9/17/01 11:35 AM	
Heat1.fdb	9KB	FDB File	9/17/01 11:35 AM	
Heat1.sot	4KB	SOT File	9/17/01 11:35 AM	
HTAxisym1.fdb	8KB	FDB File	9/17/01 11:35 AM	
InsertFlawLinear.fdb	35KB	FDB File	9/17/01 11:35 AM	
InsertFlawQuadratic.fdb	69KB	FDB File	9/17/01 11:35 AM	
187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer				

FIG. 89

Exploring -D:\FEM Builder 1.2\Test				
File Edit View Go Favorites Tools Help				
Name	Size	Type	Modified	
sharp.plt	6KB	PLT File	9/17/01 11:35 AM	
SinGen.gin	27KB	GIN File	9/17/01 11:35 AM	
SinGen.out	1,009KB	OUT File	9/17/01 11:35 AM	
Smooth2d_1.fdb	17KB	FDB File	9/17/01 11:35 AM	
Smooth2d_2.fdb	16KB	FDB File	9/17/01 11:35 AM	
Smooth2d_3.fdb	54KB	FDB File	9/17/01 11:35 AM	
Solid1L.fdb	9KB	FDB File	9/17/01 11:35 AM	
Solid1L.fil	53KB	FIL File	9/17/01 11:35 AM	
Solid1L.resinp	4KB	RESINP File	9/17/01 11:35 AM	
Solid1L.unv	13KB	UNV File	9/17/01 11:35 AM	
Solid1Q.fdb	20KB	FDB File	9/17/01 11:35 AM	
Solid1Q.fil	133KB	FIL File	9/17/01 11:35 AM	
Solid1Q.resinp	10KB	RESINP File	9/17/01 11:35 AM	
Solid1Q.unv	1KB	UNV File	9/17/01 11:35 AM	
SolidCFD1.fdb	9KB	FDB File	9/17/01 11:35 AM	
SolidCFD1.inp	3KB	INP File	9/17/01 11:35 AM	
StructuralGrid.fdb	35KB	FDB File	9/17/01 11:35 AM	
TexChem_1.fdb	9KB	FDB File	9/17/01 11:35 AM	
TexChem_1.spatial	13KB	SPATIAL File	9/17/01 11:35 AM	
ThermalGrid.unv	8KB	UNV File	9/17/01 11:35 AM	
UnitCube.fdb	7KB	FDB File	9/17/01 11:35 AM	
UnitSquare.fdb	3KB	FDB File	9/17/01 11:35 AM	
187 object(s) 49.2MB (Disk free space: 0 bytes) My Computer				

FIG. 90

TITLE: SYSTEM FOR PERFORMING COUPLED FINITE ANALYSIS

Inventor: Iverson et al.

Serial No.: 10/005,752

Docket No.: 2507-5744.1US

48/48

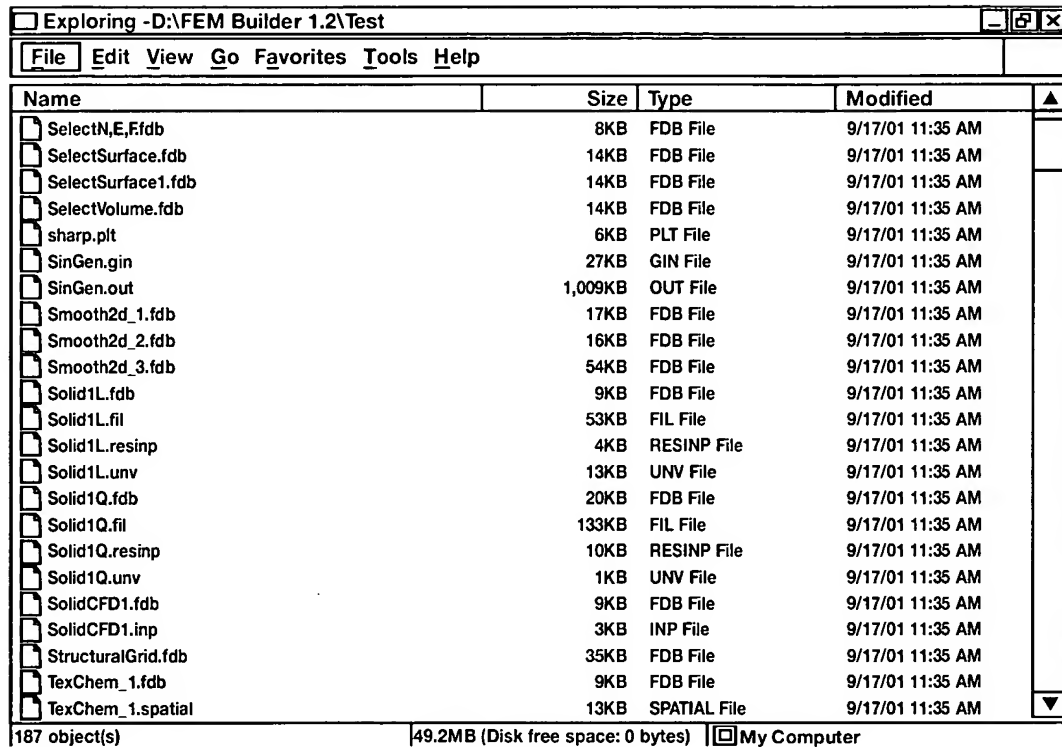


FIG. 91

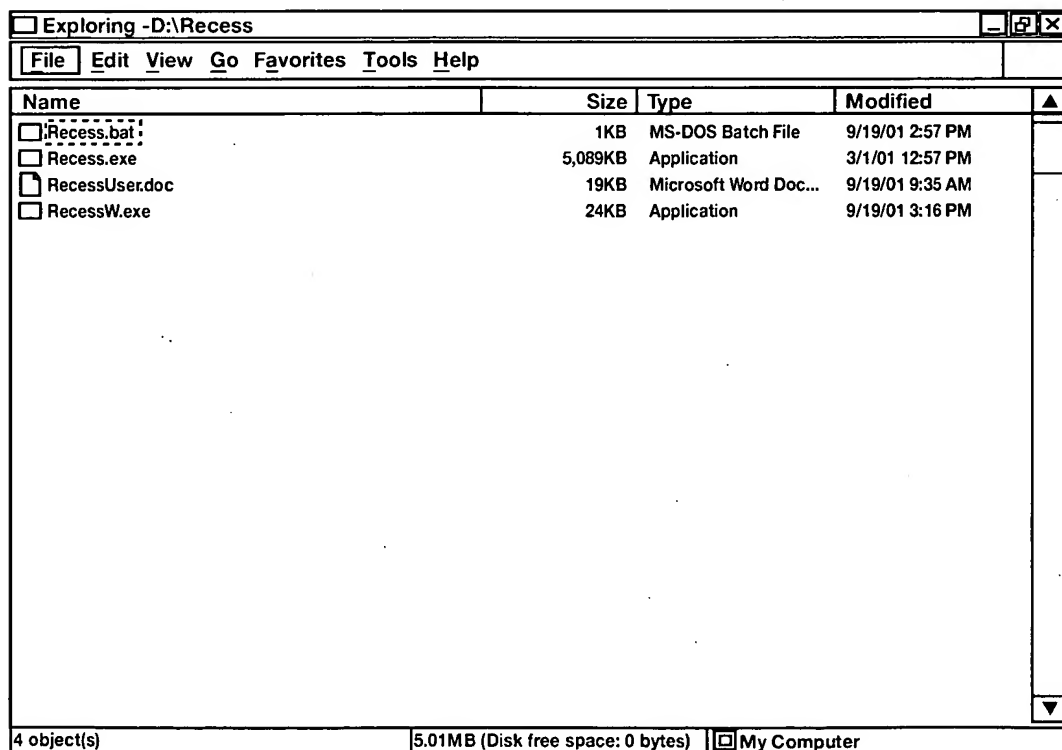


FIG. 92